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ABSTRACT

This report presents a guide for the development of a Job-Experience-Training (JET) plan for the newly-established Regional Colleges of Burma. The Regional Colleges are three-year postsecondary institutions designed to train middle level technicians to help increase the production of goods and services needed in the Burmese economy. Concentrating on the Hawaii Community College system, the author reviews the status of community college vocational education in the United States. Vocational education terms are defined in depth, the role of vocational education at high school and postsecondary levels is discussed, and cooperative education and apprenticeship training programs are analyzed. The function of advisory committees is described, as are the community service programs of the Hawaii Community College system. The planning guide for the JET program includes a proposed organizational model, job descriptions for committee members and coordinators, and guidelines for developing training plans to be used by employers, students, and coordinators. Also included are sample training plans for clerk-stenographers and for textile technicians. (DC)

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ADVANCED TRAINING IN COMMUNITY COLLEGES FOR FOUR BURMESE UNIVERSITY PROFESSORS

May - September 1977

Department of Curriculum and Instruction
College of Education
University of Hawaii
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PRELIMINARY STUDIES
FOR
A PROPOSAL FOR PLANNING OF JOB-EXPERIENCE-TRAINING (JET) PROGRAM IN REGIONAL COLLEGES OF BURMA

A Report Submitted to
The College of Education,
University of Hawaii, Honolulu, Hawaii

by

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BURMA

July 28, 1977

Table of Contents

		Page
Preface		1
Acknowledgements		ii
1. Introduction		1
2. Review on Some Important Aspects of Education System in Burma		3
2.1	Basis for Change	3
2.2	Implementation	3
2.3	Regional Colleges	4
3. Definitions of American Educational Terms		7
3.1	Apprentice Education	7
3.2	Cooperative	7
3.3	Cooperative Diversified Education	7
3.4	Cooperative Education	7
3.5	Cooperative Plan, Distributive Education	8
3.6	Journeyman	8
3.7	Program, Internship	8
3.8	Program, Work-Experience	8
3.9	Program, Work-Experience and Training	9
3.10	Program, Work-Study	9
3.11	Training, Apprentice	9
3.12	Training, On-the-Job	10
3.13	Training, On-the-Job, Explanation of the Value Of.	10
3.14	Vocational Education	10
4. The Role of Vocational Education in Hawaii		11
4.1	High School Level	11
4.2	Community College Level	12
4.3	Administration Structure	13
5. Community College System in Hawaii		14
5.1	Structure	14
5.2	Objectives	14
5.3	Enrollment	14
5.4	Curricula Offered by Educational Objectives	14
5.5	Honolulu Community College	20
5.6	Kapiolani Community College	20
5.7	Leeward Community College	20

		Page
6.	Review of OJT Programs in American Community Colleges . . .	21
6.1	Different OJT Programs	21
6.2	Cooperative Education	21
6.21	Pattern of Operation	21
6.22	Values and Objectives	21
6.221	Values to Students	21
6.222	Value to Academic Institutions	22
6.223	Value to Job Stations	23
6.224	Values to Society	23
6.23	Types of Cooperative Education Programs . . .	23
6.231	Basic Types	25
6.232	Programs Other Than for Community Colleges .	26
6.233	Program for Community and Junior Colleges . .	27
6.24	Model of Organization	28
6.241	Conventional Model	29
6.242	Alternating Model	29
6.2421	The Four Quarter Model	29
6.2422	The Trimester Model	32
6.243	The Parallel System Model	32
6.25	Cooperative Education Coordinators	35
6.251	Main Duties	35
6.252	Weekly Load	36
6.253	Handbook	37
6.26	Training Stations	37
6.27	Credit for Off-Campus Experience	38
6.28	Problems in Implementation	39
6.29	Cooperative Education Programs in Hawaiian Community Colleges	40
7.	Apprenticeship Training Education	44
7.1	Background Information	44
7.2	National and Federal Level Support	45
7.3	State and Territorial Apprenticeship Agencies	45
7.4	State Vocational Education Departments and Community Colleges	46
7.5	Types of Apprenticeship Programs	46
7.51	Individual Programs	46
7.52	Joint Programs	46
7.521	Individual Joint Programs	46
7.522	Group Joint Programs	47
7.53	Government Programs	47
7.6	Other Relevant Information	47
7.7	Related Instruction in Apprenticeship Training	48
7.8	The Relationship Between Cooperative Education and Apprenticeship Training Education in Hawaiian Community Colleges	48

		Page
7.9	Apprenticeship Training Programs in Hawaiian Community Colleges	49
7.10	Training Evaluation Records	49
8.	Advisory Committees	50
8.1	Definition	50
8.2	Emphasis	50
8.3	Types of Advisory Committees	50
8.4	Composition of Advisory Committees	51
8.5	Functions of Committees	51
8.6	Case Studies	51
9.	Community Colleges and the Community Service in Hawaii	53
9.1	Program Activities of the Community Services	53
9.2	Community Service Technician	54
10.	Planning for JET Program for Regional Colleges in Burma	56
10.1	Coordination	56
10.2	Formation of Committees	57
10.3	Committee Members Tenure	59
10.4	Alternatives for JET Program Design	60
10.5	Values and Objectives for JET	62
10.6	JET Coordinators	62
10.7	Coordinators' Guidebook	63
10.8	Weekly Load for JET Coordinators	64
10.9	Job Stations	65
10.91	Guidelines for Selection	66
10.92	Standards	66
10.10	JET Plan	67
10.101	Step-by-Step Training Plan	68
10.102	Apprenticeship Based Training Plan	71
10.11	JET Record System	74
Footnotes		80
Bibliography		82

PREFACE

This report was prepared under the supervision of Dr. Lawrence F. H. Zane, Professor in Education, Department of Curriculum and Instruction, College of Education, University of Hawaii, Honolulu, and with the cooperation of Dr. Kin Mg Kywe, Lecturer, Institute of Economics, Rangoon; U Hla Myint, Lecturer, Government Technical Institute, Insein, Rangoon; and U Kyin Soe, Lecturer, Rangoon Institute of Technology, Gyogone, Rangoon.

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1. INTRODUCTION

Under the Cultural Exchange Program between the governments of the United States of America and Socialist Republic of the Union of Burma, together with the sponsorship of the Bureau of Educational and Cultural Affairs of the Department of State under the Fulbright-Hays Act of 1961, a project for "Advanced Training in Community Colleges for Four University Professors" was arranged by Dr. Lawrence F. H. Zane of the Department of Curriculum and Instruction, College of Education, University of Hawaii.

The purpose of this project is to provide a period of advanced training in American community college functions for four educators from the Socialist Republic of the Union of Burma, for a period of three months from May 23, 1977 to August 20, 1977.

The related fields of study selected and trained for the Burmese educators are:

1. Planning and Statistics
2. Curriculum Development
3. Training of Vocational-Technical Teachers
4. On-the-Job Training (OJT) Program, which will herein be modified as Job-Experience Training (JET) Program

Through seminars given by eminent educationists from various academic institutions in Hawaii, as well as discussions with responsible people from various State departments of the State of Hawaii, it has been made possible for the four Brumese educators to gain first-hand information on the planning and functions of the community colleges within the University of Hawaii System, and within the Hawaii Community College System itself.

This report can only describe an attempt to correlate various information and data gathered on some of the Job-Experience-Training programs carried out currently (1) as co-operative education in the Hawaii Community College System (CCS), and (2) as apprenticeship training education on the State of Hawaii level. It is merely hoped that, information and data collected in so short a time, from so vast a world of American literature, will fit into the planning of the Job-Experience Training program in the Regional Colleges of Burma.

2. REVIEW ON SOME IMPORTANT ASPECTS OF EDUCATION SYSTEM IN BURMA

2.1 Basis for Change

Before 1964 the education system in Burma had too much emphasis in training the students to become administrators in government offices, factories and private business. This trend was practiced up till now with the result that there is a surplus of young educated people who are unemployed in the offices and unemployable in production-oriented concerns. Therefore, in 1977, the Ministry of Education, Socialist Republic of the Union of Burma, introduced a modification to the education system by laying down a policy to provide students at all levels with a production-oriented education, and to produce for the country, middle-rung technicians and middle-management personnel.[1]

2.2 Implementation

To implement this production-oriented education system, the Ministry of Education has made some plans by making use of its available resources. Recently, with the help of the Ministry of Education, 17 regional colleges were opened up throughout the 14 States and Divisions by the respective Regional College Supervisory Committees, under the supervision of their Regional Peoples' Councils. The aims and objectives for which the colleges are designed follow:

1. To produce middle-rung technicians.
2. To help in the social, economic and industrial development of the region.
3. To enable the young graduates to set up their own graduate cooperative societies.
4. To enable the students to pursue learning to obtain a higher degree after they have been trained vocationally in the regional colleges.

5. To tap youth's energy in related fields.

It was felt that expertise, advice and shared experiences with other countries would be necessary for the creation of the country's regional colleges. Through cordial relations between the two countries, an exchange of visits of experienced educators from U.S.A. and professors from Burma was made in 1977. It is hoped that experiences gained through such exchanges will be of great value for the promotion of the regional college system in Burma.

2.3. Regional Colleges (R.C.)

17 R.C. opened in various parts of Burma as of May, 1977, is shown in Table 1.

TABLE 1
Number of Regional Colleges in Burma
(May, 1977)

	State/Division	Location	No. of R.C.
1.	Arakan State	Akyab	1
2.	Irrawaddy Division	Bassein	1
3.	Kachin State	Myitkyina	1
4.	Karen State	Pa-an	1
5.	Magwe Division	Yenan-Chaung	1
6.	Magwe Division	Pakokku	1
7.	Mandalay Division	Mandalay	1
8.	Mandalay Division	Meik-ti-la	1
9.	Mon State	Moulmein	1
10.	Pegu Division	Pegu	1
11.	Pegu Division	Shwedaung	1
12.	Rangoon Division	Thamaing	1
13.	Rangoon Division	Botataung	1
14.	Sagaing Division	Shwebo	1
15.	Sagaing Division	Monywa	1
16.	Shan State	Taung-gyi	1
17.	Tenasserim Division	Tavoy	1
		TOTAL	17

The minimum duration of study in all 17 R.C. is 2 years. However, after completion of the second year, student will be encouraged to undergo 1 more year of job-experience training (JET). In the first year of R.C., basic subjects with curriculum content designed to give support and linkage to the 23 technologies to be offered in the second year, will be taught to all students.

In the second year of R.C., 23 suitable technologies are to be offered. Each R.C., in consultation with the respective regional peoples' council, exercises the freedom to choose those suitable technologies after making a preliminary survey on (1) whether there will be any candidates, (2) whether there are training facilities in the college and/or within that region, (3) what raw materials are abundantly available in the region, (4) which technology will fit in best in the regional development program.

After completing his studies in the second year, the student will be in a position to choose any one of at least four possible alternatives:

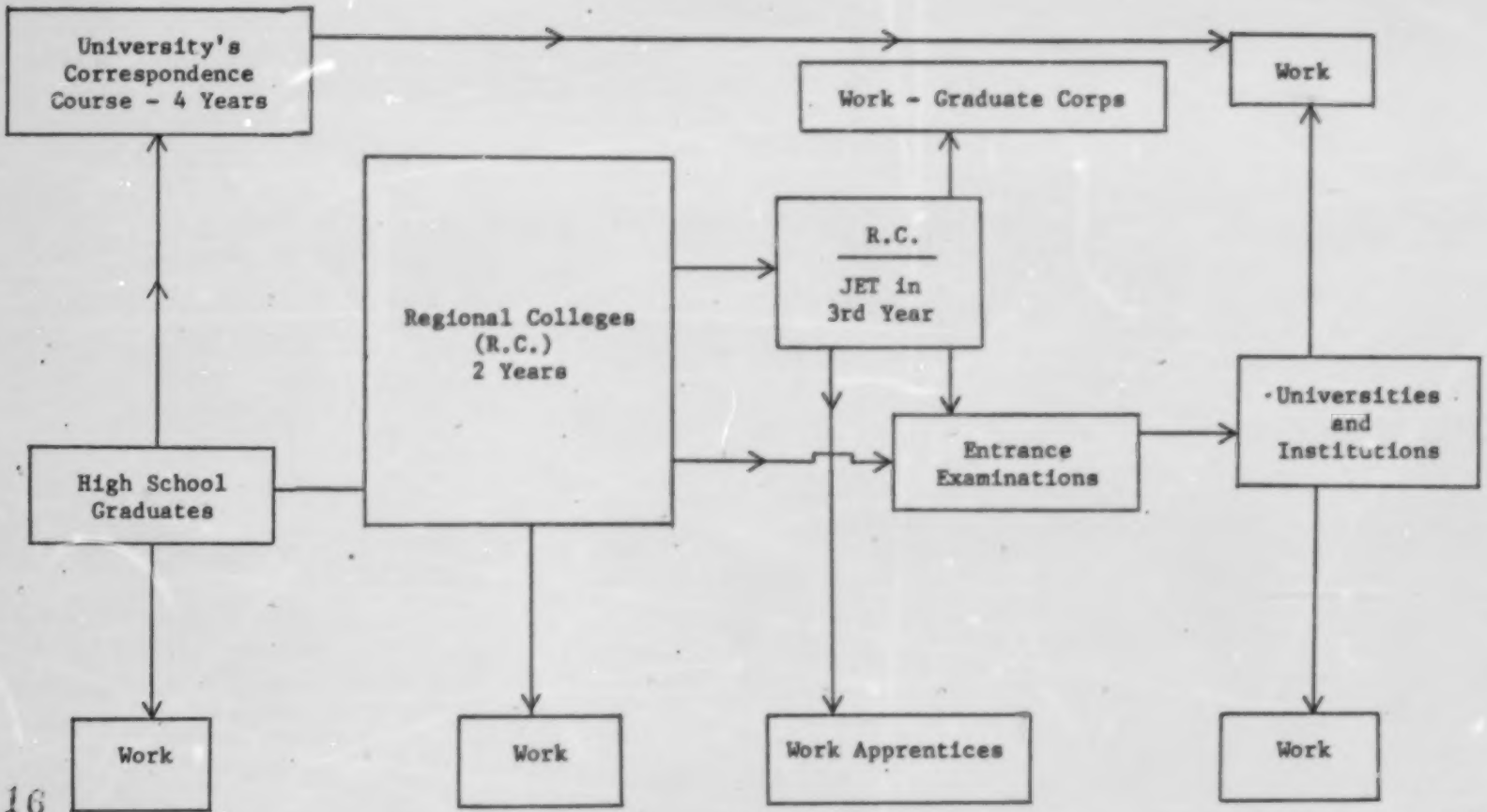
1. To go out to work.
2. To undertake JET program, as an apprentice in a government factory or office or a regional cooperative organization.
3. To undergo JET program as a partner in the college graduate cooperative society of the related trade.
4. To prepare for university entrance.

A flowchart for these alternatives is shown in Figure 1.

However, an effective form of credit should be considered for those students who have undergone the JET program, either in the form of (1) priority in job placements of (2) giving credit in the final selection for entrance to institutes of higher learning.

Figure 1

POSSIBLE PLACEMENT ALTERNATIVES FOR R.C. GRADUATES



3. DEFINITIONS OF AMERICAN EDUCATIONAL TERMS

To retain their own original meaning, these definitions are found, unless otherwise stated, in the Dictionary of Education, 3rd. edition, McGraw-Hill Book company, by C.V. Good.

3.1 Apprentice Education

A type of training commonly provided youths prepared for a trade before the advent of the factory system.

3.2 Cooperative

An enterprise in which a number of persons having common interests combine to produce, purchase, or distribute goods jointly so as to eliminate the profits of middleman. Most cooperatives in the U.S. are for purchase and distribution rather than production.

3.3 Cooperative Diversified Education

A secondary school cooperative work-experience program in which students are given vocational instruction in (a) any one of a variety of business or trade and industrial occupations, (b) trade and industrial occupations only, or (c) business occupations only, such as retailing, office work, business management, etc.

3.4 Cooperative Education

A program of persons enrolled in a school that provides for alternating study in a school with a job in industry or business, the two experiences being so planned and supervised cooperatively by the school and the employer that each contributes definitely to the student's development in his chosen occupation: work periods and school attendance may be on

alternate half-days, weeks or other periods of time.

N.B. Syn: Cooperative Work-Experience Program

3.5 Cooperative Plan, Distributive Education

An organizational pattern of instruction which involves regularly scheduled part-time employment and which gives students an opportunity to apply classroom learning in practice: it enables them to develop occupational competencies through training on jobs related to their distributive educational interests.

3.6 Journeyman

"A qualified tradesman who has mastered a specific skill or craft. The worker performs a particular job from a description of the finished product or from sketches or blueprints, combining various basic operations to complete a particular job."[2]

3.7 Program, Internship (as in education)

A program in which, during the first 2 to 3 years of a teacher's career, he is considered an intern practicing his profession under the close supervision of a critic teacher and a supervising team from his college or university and attending seminars in the area of diagnostic and remedial techniques in his teaching field; when the program is completed he has earned his master's degree and then takes a state examination, administered by the profession, or a state license to practice as a teacher.

3.8 Program, Work-Experience (special education)

A specific phase of the high school work-study program for the retarded which provides opportunities for on-the-job training and evaluation.

3.9 Program, Work-Experience and Training

A program funded by the Department of Health, Education and Welfare (HEW), under the delegation of authority to the Office of Economic Opportunity for the purpose of increasing the employability of unemployed, needy persons; offers adult basic education, equivalent to high school education, vocational training, and on-the-job experiences; a wide variety of training programs are provided, especially in the health occupations and the service trades such as food handling and building maintenance.

3.10 Program, Work-Study

(1) A plan, primarily funded by the Federal government under terms of the Economic Opportunity Act of 1964, extended by the Higher Education Act of 1965, and administered by individual higher education institutions--for providing part-time work either at the institution or in the community agencies for full-time students who qualify on the basis of low economic status.

(2) In the high school, educational experience in which the student spends a certain amount of hours a day in classes in the school, acquiring basic learnings, and a specified number of hours working for some company or tradesman, generally on a salary basis; the actual work experience is administered jointly by the school and the employer.

N.B. Syn: Cooperative Education

3.11 Training, Apprentice

An organized system for providing young people with the manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations; involves a specified rotative series of experiences in such occupations and related studies at a vocational school.

3.12 Training, On-the-Job

Supervision and other supplemental instruction furnished to a learner while he is employed as a beginner or trainee in the regular duties of a position or job.

3.13 Training, On-the-Job, Explanation of the Value Of

The American concept is that even the simplest of skills must be learned from someone who has already had experience. In industry and business, there is always a need for skilled workers to handle new jobs and to replace those who have either retired or passed away. If the skill is passed into the hands of the younger generation, the business or industry will survive in this highly competitive world.

Skilled workers, craftsmen and tradesmen have been recruited and trained on-the-job. Whether it be fishing, woodworking or cooking, on-the-job training is needed to train people for the work to be done.

On-the-job training is a device of tapping the skill potential of a business or industry. In addition, since the on-the-job training program involves the development of the instructor as a by-product of the main program, the instructor has to learn and always prove that he knows more than the student, thus he becomes more valuable to the company as well as to himself.

3.14 Vocational Education

"The organized education programs which are directly related to the preparation of students for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree."[3]

4. THE ROLE OF VOCATIONAL EDUCATION IN HAWAII

In Hawaii, the following trades are included in the area of vocational education:

1. Health Occupation Education
2. Trade and Industry Education
3. Technical Education
4. Agricultural Education
5. Home Economics Education
6. Office Education
7. Distributive Education
8. Industrial Arts, Career Education, and Vocational Guidance and Counseling

Currently in Hawaii, vocational programs begin in high school and continue through the community colleges.

4.1 High School Level[4]

For different high school students in Hawaii, three types of programs can be offered:

1. Introduction to vocations: This program is open to all students, and provides actual job training on campus or in the community.
2. Pre-Industrial Preparation: A program designed especially for disadvantaged students. This program emphasizes improvement of basic verbal, mathematic and scientific skills by relating them to actual job experiences.
3. Occupational Skills: A program for handicapped students. This program provides basic job skill training and counseling.

Some vocational programs of the first type were observed at Farrington High School. It was learned that plans have been made to try to introduce all the three vocational programs in all the high schools of the State of Hawaii.

4.2 Community College Level[5]

Graduates of the secondary school program in Hawaii may continue their education at the community college, or a four year university. The vocational education programs in the community colleges are designed to meet the needs of the employers, students and community.

The vocational training at the seven community colleges in Hawaii ranges from eight weeks to about two years in length.

Honolulu Community College offers 2 year vocational-technical programs in architecture, auto-body repair and painting, aviation maintenance, carpentry, commercial art, commercial banking, cosmetology, electronics, fashion design, fire science, heavy equipment maintenance and repair, industrial education, machine shop, occupational safety and health, refrigeration and air conditioning, sheet metal and plastics technology and welding technology.

Kapiolani Community College offers 2 year vocational programs in business, health, hotel and food services. Leeward Community College offers 2 year courses in marine technology, auto mechanics, and business and food services. Windward Community College, being the newest in Hawaii, is developing vocational programs in business education, with plans to expand into vocational areas, such as auto maintenance, secretarial sciences, social justice (criminal), agriculture/horticulture, accounting, visitor industry and financial operations.

Kauai Community College, Hawaii Community College, and Maui Community College offer a wide range of programs in fields such as business, agriculture, trade-technical and health.

4.3 Administration Structure

The State Director for Vocational Education, under the auspices of the State Board for Vocational Education, works closely with the Chancellor's office of the Hawaii Community College System.

The Office of the State Director for Vocational Education serves under the direction of the administrative officer for vocational education who also is the President of the University of Hawaii.

The State Director for Vocational Education has the responsibility to give assistance in the operation of vocational programs in Hawaii community colleges.

5. COMMUNITY COLLEGE SYSTEM IN HAWAII

Before discussing the community college system in Hawaii, the place of the University of Hawaii System in the State of Hawaii administration structure needs to be viewed. (See Chart 1)

5.1 Structure

The Hawaii Community College System can be visualized as shown in Chart 2. This system is administered by the same Board of Regents as in the University of Hawaii. There are 7 community colleges in the State of Hawaii, as shown in Chart 2.

5.2 Objectives

The community college system was introduced in Hawaii in 1965, with it's main objectives as follows:

1. To develop a vocational-technical education in community colleges.
2. To offer community services in community colleges.
3. To support the liberal arts transfer to university education.

5.3 Enrollment

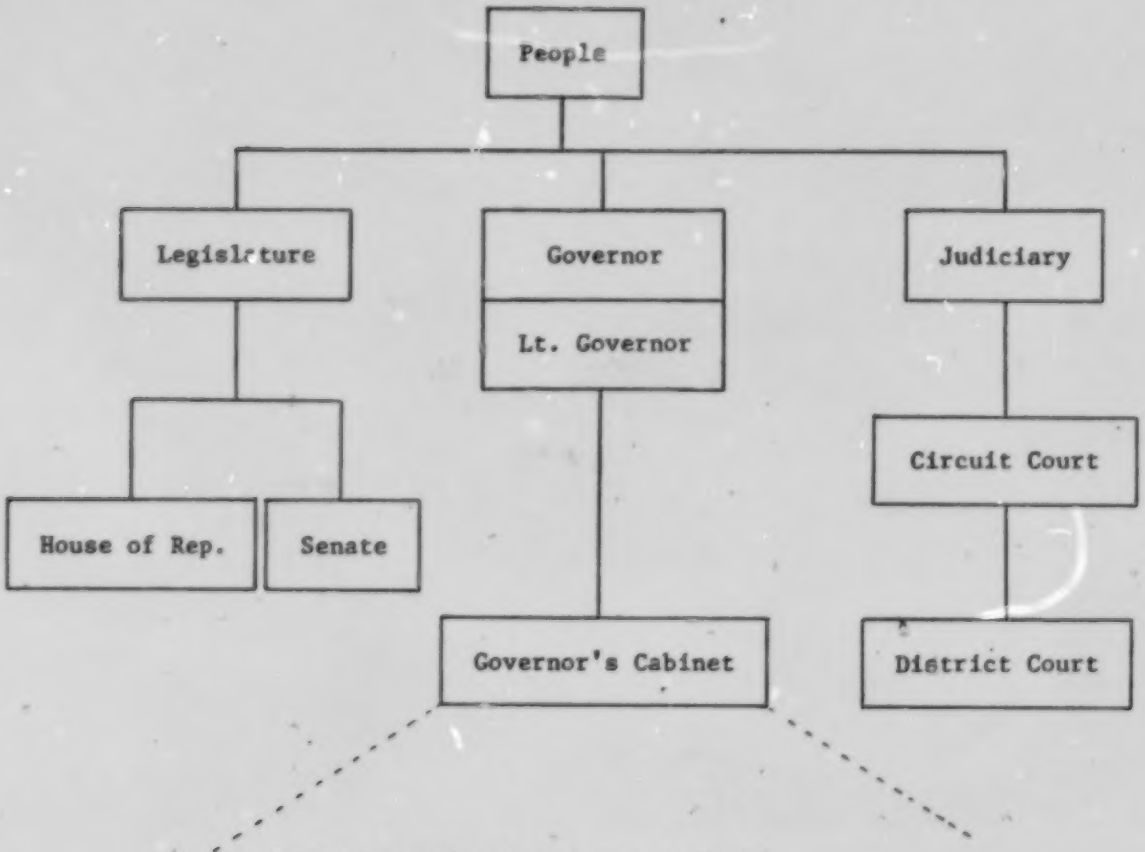
To get an estimate of student intake into different community colleges, and transfer of community college graduates from these community colleges to the University of Hawaii, the 1976 enrollment is shown in Table 2.

5.4 Curricula Offered by Educational Objectives

Curricula offered in different community colleges in Hawaii as of Fall 1976 is shown in Table 3. This table also indicates the types of degrees offered respectively to the community college graduates.

Chart 1

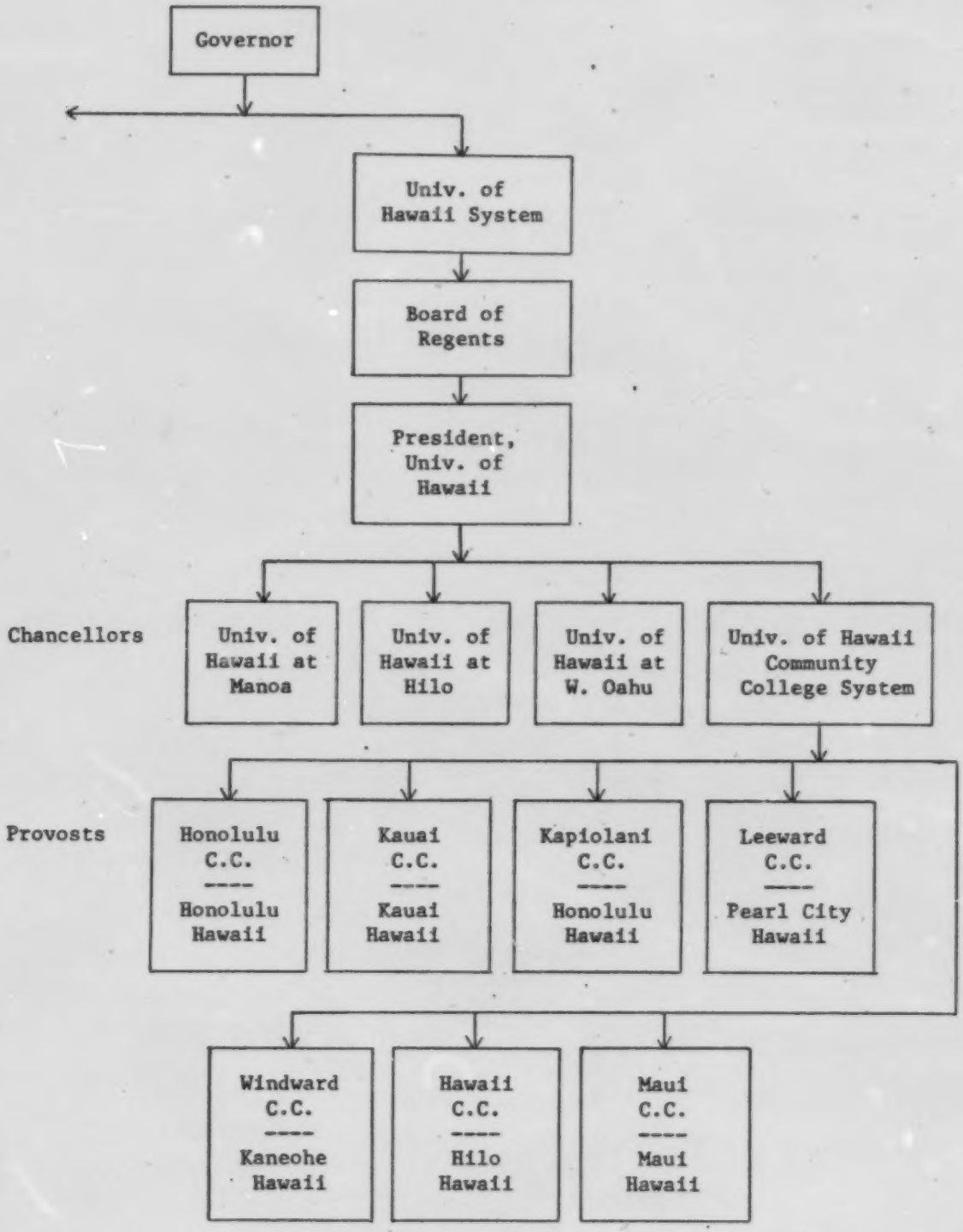
PLACE OF UH SYSTEM IN STATE OF HAWAII ADMINISTRATION STRUCTURE



1. Department of the Attorney General
2. Department of Finance
3. Department of Labor and Industrial Relations
4. Department of Personnel
5. Department of Health
6. Department of Education
7. Department of Welfare
8. Department of Hawaii Homes
9. Department of Regulator
10. Department of Economic Planning & Development
11. Department of Agriculture
12. Department of Military
13. Department of Transport
14. Department of Accounting & General Services
15. Department of Taxation
16. Department of Land & Natural Resources
17. Department of Hawaii System

Chart 2

COMMUNITY COLLEGE SYSTEM IN HAWAII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Board of Regents
President, Univ. of Hawaii
Chancellors
Univ. of Hawaii at Manoa
Univ. of Hawaii at Hilo
Univ. of Hawaii at W. Oahu
Univ. of Hawaii Community College System
Provosts
Honolulu C.C. ---- Honolulu Hawaii
Kauai C.C. ---- Kauai Hawaii
Kapiolani C.C. ---- Honolulu Hawaii
Leeward C.C. ---- Pearl City Hawaii
Windward C.C. ---- Kaneohe Hawaii
Hawaii C.C. ---- Hilo Hawaii
Maui C.C. ---- Maui Hawaii

Table 2

ENROLLMENT IN COMMUNITY COLLEGES, HAWAII, FALL 1976 (AS OF OCTOBER 15)

	Hawaii	Honolulu	Kapiolani	Kauai	Leeward	Maui	Windward	Hoomana
Total	2091	8991	4617	1302	6924	2030	1174	107
By Major Programs								
% Liberal Arts	30	29	42	34	68	38	85	?
% Vocational	63	63	53	39	27	43	2	?
% Unclassified	7	8	5	27	5	17	13	?
By High School Source								
% From Hawaii High Schools	86	74	86	66	76	73	74	?

Note: Transfer from these community colleges to the University at Manoa is approximately 850 and to the University at Hilo is approximately 80. The rest of the community college graduates go to work in different professions, or continue their education on the mainland.

Table 3*

CURRICULA OFFERED BY EDUCATIONAL OBJECTIVES
FALL 1976

AS = Associate of Science
AA = Associate of Arts
CA = Certificate of Achievement

New curriculum offerings are circled

Field of Study	Hawaii	Honolulu	Kapiolani	Kauai	Leeward	Maui	Windward
GENERAL & PRE-PROF: Liberal Arts	AA	AA	AA	AA	AA	AA	AA
VOCATIONAL EDUCATION							
Business							
Accounting	AS, CA		AS	AS, CA	AS, CA	AS, CA	
Business, General			CA	AS, CA		AS, CA	
Clerical	CA		CA	AS, CA			CA
Computer Science/Data Processing	AS, CA		AS, CA		AS AA		
Management					AS		
Mid-Management: Hotel Op			AS			AS, CA	
Mid-Management: Merchandising	AS, CA		AS, CA			AS, CA	
Secretarial Science	AS, CA		AS	AS, CA	AS, CA	AS, CA	
Health Services							
Dental Assisting			CA				
Dietetic Technology			AS				
Medical Assisting			AS				
Medical Lab Assisting			AS				
Medical Records Technician			AS				
Nursing: LPN	CA		CA	CA		CA	
AS Nursing	AS			AS		AS	
Occupational Therapy Assistant			AS				
Radiologic Technology			AS				
Respiratory Therapy			AS				

*Source: c/o Dr. Shiro Amioka, Chancellor, CCS, U.H.

Field of Study	Hawaii	Honolulu	Kapiolani	Kauai	Leeward	Maui	Windward
GENERAL & PRE-PROF: Liberal Arts	AA	AA	AA	AA	AA	AA	AA
VOCATIONAL EDUCATION							
Hotel & Food Services							
Commercial Baking		AS, CA					
Food Service	AS, CA		AS, CA		AS, CA		
Public Services							
Fire Science	AS	AS, CA		AS, CA			
Human Service		AS, CA				AS, CA	
Industrial Education		AA					
Legal Assistant			AS				
Library Technology					AS, CA		
Occupational Safety & Health		AS, CA					
Police Science	AS	AS		AS		AS, CA	
Recreational Instructor					AS, CA		
Technology							
Agriculture	AS, CA					AS, CA	
Apparel Trades	CA	AS, CA				AS, CA	
Auto Body Repair & Painting	AS, CA	AS, CA		AS, CA		AS, CA	
Auto Mechanics Technology	AS, CA	AS, CA		AS, CA	AS, CA	AS, CA	
Aviation Maintenance Tech		AS, CA					
Carpentry	AS, CA	AS, CA		AS, CA		AS, CA	
Commercial Art		AS					
Cosmetology		AS, CA					
Diesel Mechanics	AS, CA	AS, CA					
Drafting Technology	AS, CA	AS, CA		AS, CA	AS, CA	AS, CA	
Electricity	AS, CA	AS, CA					
Electronics	AS, CA	AS					
Engineering Technology		AS					
Graphic Arts					AS, CA		
Maintenance Technology						CA	
Marine Technology					AS, CA		
Metal Working: Machine Shop	AS, CA	AS, CA					
Sheet Met		AS, CA				AS, CA	
Welding	AS, CA	AS, CA		AS, CA		CA	
Refrigeration & Air Cond		AS, CA					

5.5 Honolulu Community College (HCC)

This college was organized by taking over the Territorial Trade School in 1920, reorganizing it in association with McKinley High School in 1927, and upgrading it in 1955 into Honolulu Technical School. In 1965, this technical school was incorporated into the University of Hawaii, Community College System as a community college. As of today, this community college offers programs in many fields of occupational and vocational education. The present status of the college, academic information and regulations, services to students, degree requirements, departments and curricula are given in the 1976-77 college catalogue.

5.6 Kapiolani Community College (KCC)

KCC was formerly a technical school offering hotel and restaurant programs (in 1946), practical nursing (in 1947), business education (in 1956), dental assisting (in 1959), and later on food services education. In 1965, Kapiolani Technical School was transferred to the University of Hawaii, Community College System. Recently a liberal arts program was introduced for those who may want to complete course work toward a baccalaureate degree at a four year college.

General information, student affairs, academic regulations, curricula and description of courses are given in the 1976-77 college catalogue.

5.7 Leeward Community College (LCC)

This is the only college built solely as a community college, opened in February 1968. Academic and transfer information, degree and certificate programs, course offerings, and special programs and community services offered by this college are given in the 1976-77 college catalogue.

6. REVIEW OF OJT PROGRAMS IN AMERICAN COMMUNITY COLLEGES

6.1 Different OJT Programs

In America, such training programs take different forms, depending upon the source of funding for the program, the executing agency, and the purpose of service for which the fund is to be awarded. Some important programs are reviewed below.

1. Cooperative Education Program: This program takes 2 forms
   (a) Vocational-technical cooperative education program, funded by the Federal government, and
   (b) liberal arts cooperative education, funded either by the State or the Federal government. This cooperative education program is offered and administered by the college as a long-term investment in education.
2. Apprenticeship Training Program: In conjunction with the trade unions, some of the community colleges take on the responsibility of providing extended day lecture classes to young apprentices working in industries or business concerns.

6.2 Cooperative Education

6.21 Pattern of Operation[6] - In cooperative education, periods of classroom instructions combine with off-campus experience. There are different ways of operating off-campus activities, as well as combining them with classroom instructions. In most cases these experiences are some kind of employment which is paid by the employer, whose company has a kind of job related to the student's major fields of study.

6.22 Values and Objectives

6.221 Values to Students - (1) As a result of reinforcing the theories and principles learned in the classroom with concrete

application on work assignments, the students find meaning of cooperative education and they become motivated. (2) Provided the students perform enthusiastically in their job assignments, they tend to gain increasing confidence in their ability to attack their studies with greater energy and assurance. (3) Not only practicing the knowledge and skills learned in academic institutions, they can also gain new knowledge and skills on-the-job and this contributes to the student's total understanding of the job. (4) They gain a more realistic understanding of the tasks involved, the conditions under which these tasks operate, and the kinds of rewards and punishments obtained in a variety of occupations. (5) The students gain some knowledge in deciding the choice of careers for themselves. (6) The students have an opportunity to develop realistic social attitudes, attitudes of cooperation to adjust to work conditions and to function effectively as part of a team. (7) They are provided with financial rewards while learning employment skills and understanding. (8) They gain an opportunity to broaden understanding and appreciation of the world of work, and also to gain entry into the same work station.

6.222 Values to Academic Institutions - (1) Indirectly, the institution is always in touch with business, industry and professions and thus the information gained through the students is used in planning the curriculum and organization in teaching. (2) This program increases the availability of learning facilities without major expenditures for shop and laboratory equipment. (3) It provides an opportunity for college personnel

to keep informed of constantly changing procedures and practices in the outside world. (4) Institutions are able to utilize their resources more economically and effectively. By using a rotation system, they can increase the student population without any increase in the physical plant.

6.223 Values to Job Stations - (1) The employer can plan for his work station to have all the work done more quickly and cheaply. (2) Through this device he can recruit permanent personnel, who are better employees than those who have no prior connection with the company; it also helps in minimizing the training cost. (3) The industrial or professional employing agency and the academic institution can develop steps towards a long-term training education partnership. (4) It provides an opportunity for the employer to render an important public service.

6.224 Values to Society - (1) Support of education by earnings of the student lessens the dependence on government grants, scholarships or loans while adding to state and federal income through taxes paid on these earnings. (2) It also helps to improve educational opportunities for youths from minority backgrounds and low-income strata. (3) It provides an effective means of preparing students for productive citizenship in the community. (4) It provides a means for developing good academic institution relations by utilizing human and physical resources in the community.

6.23 Types of Cooperative Education Programs[7] - Academic institutions operate the program according to their own institutional goals and long-range objectives, taking into account also the limitations

of the current institutional capabilities. The extent to which the cooperative education plan is part of the total educational program varies greatly as summarized below.

1. In some institutions, cooperative education is optional in all curricula in which it is offered.
2. In some institutions, cooperative education is mandatory for all students in the institution.
3. Cooperative education is selective in some institutions, by limiting the enrollment of students on the basis of academic performance.

Institutes of higher learning, followed by high schools, and then community colleges, are settings for the objectives of cooperative education. Different institutional types of programs are condensed as follows:

1. Community and Junior College Programs
2. Baccalaureate 4 year Programs
3. Baccalaureate 5 year Programs
4. Junior-Senior Transfer Programs and Consortia
5. Graduate Programs
6. Combined Study and Cooperative Work Placement
7. Company-Based Programs
8. Miscellaneous

Of these 8 different types of programs, number 2, number 3, and number 5 are found to be concerned mainly with the 4 year college or university. Number 1 is found to be applicable for 2 year community colleges, number 4 is for articulation of community colleges and the 4 year universities. The principle in the number 6 program is applicable both for community colleges and universities. The number 7 program is usually within the confines

of a big company, such as General Motors Institute. Finally, number 8 deals mainly in the liberal arts colleges, where the students receive credit for periods of travel in foreign lands in recognition of the benefits of the experience, if his experiences are carried out according to the directions from the college.

6.231 Basic Types - Two basic types of programs are in use.

1. Cooperative vocational education, which is federally funded and supported by the Vocational Education Amendment Act of 1968; the funding is administered by the state offices of vocational education. The main emphasis is that the students in this program usually alternate half-days of study with half-days of job experience. Students can also be trained through other alternative patterns of work and study periods, and still be eligible for federal aid. However, students of cooperative vocational education program choose a particular occupation, follow the set curriculum as part of a professional pursuit, and earn job experiences which are correlated with their academic course schedule.

2. General type cooperative education, which is partially federally supported under the Higher Education Act of 1968 as administered by the Bureau of Higher Education, United States Office of Education. It has a broader purpose; it involves either alternation of studies and work in seperate blocks of time or the concurrent procedure of working half-time jobs and studying half time.

The liberal arts and sciences cooperative program can be considered as one of the general types. In Hawaii, the liberal arts and sciences program are run in 7 community colleges using one of the following plans: (1) the parallel plan. (2) extended day plan, and (3) alternate sequence plan. This program is funded by the University of Hawaii, Community College System, under the Higher Education Act, Title IV, Part D.[8]

6.232 Programs Other Than for Community Colleges - The four year programs tend to emphasize in the liberal arts area in the universities and colleges, where the OJT programs are assigned during an off-campus term. But in some colleges the cooperative education programs are scheduled to function during the summer months, so that the students will be credited with one year of work experience before graduation.

In the five year baccalaureate program, the value of cooperative education is raised to the extent that another year to the normal four year curricula is added. In the fifth year, the student will have sufficient exposure to working situations to gain further educational experience. It is also possible to arrange the program to allow the student to be able to start his training at the end of the freshman or sophomore year, by regularly alternating between college and the work station. The students are usually paired so that one student is on the job while the other is on campus.

In the junior-senior transfer programs, the senior cooperative Colleges and Universities accept the students from the junior cooperative colleges and universities. Thus the student is able

to maintain the same affiliation with the employer on the cooperative education program throughout his tenure at both schools.

The graduate cooperative education program is developed for advanced degree study. The M.Sc. and Ph.D. students will have to work and carry out research in industrial laboratories, under the joint supervision of the university and the industrial stations employing supervisors of equivalent qualifications.

In the combined study and cooperative work advancement program, the student is formally tied to the academic institution where he has to take evening courses while working at the work station. The cooperative student is still considered a full-time basis when his employment period is concluded.

The company based cooperative education program is located within the confines of the company. Some big companies and industrial enterprises form their own training institutes which not only grant a baccalaureate degree but also place all of the students in various plants and installations of the company for practical experience.

6.233 Program for Community and Junior Colleges - Several features of the 2 year colleges are similar to those of senior cooperative colleges. The 2 year colleges implemented the cooperative education program by making use of the Federal Work-Study funds, so as to provide employment experience with non-profit agencies for students of low-income level. For them, available programs are:

1. Commercial cooperative education, in which classroom instruction and OJT are combined to develop vocational competency in office skills. The classroom instruction includes such subjects as bookkeeping, shorthand, and business machine operation, with these school subjects usually given previous to the period of employment training.

2. Distributive cooperative education, which is a combination of related general instruction and training through employment in behind-the-counter and other merchandising jobs.

3. Industrial cooperative education, which is a combination of related general information and related occupational theory, together with supervised training in approved places of employment. It provides instruction and training involving manipulative skills in trade, industrial and technical vocations.

4. Diversified cooperative education, in which students are engaged in a broad range of jobs which are likely to include agriculture, distribution, industrial and service work.

6.24 Model of Organization[9] - Cooperative programs can be developed around a number of different college calendars, extending probably through the summer. Various patterns include (1) alternating a full term in college with a full term on the job. (2) work experience paralleling enrollment in regular college classes, (3) one term on the job as an initial step into expanded types of cooperative programs, and (4) working full-time while attending class part-time in order to update work skills for career improvement.

In the more general types of cooperative education, students usually alternate periods of study with periods of employment, on the quarter, trimester or semester calendar of the college. Possible models follow.

6.241 Conventional Model[10] - The conventional academic calendar is considered divisible either into two parts (semesters) or three parts (trimesters) of a "nominal" nine-month period from about mid-September to early June. A typical nine-month academic year seldom takes 39 weeks of classroom activities. Allowing for vacations and examination periods, the actual classroom contact may come close to 30 weeks. This model is shown in Chart 3.

6.242 Alternating Model[11] - This model is based on alternating a full term in college with a full term on the job. The calendar is considered divisible into either four quarters or into three trimesters. In the Four Quarter Model, alternating periods of work and study can easily be accommodated; it requires year round operation of the college. However, the concept of year round operation may be undesirable or unacceptable for some students. Therefore, in the Trimester Model, students study two out of three periods. The remainder of the calendar year is devoted to work, vacation, and for some students, special projects.

6.2421 The Four Quarter Model - In this model, two separate student bodies are assigned to a single physical plant, a single faculty, and a single administration organization. The model is shown in Chart 4.

The two student bodies are designated as "A-Division" and "B-Division" respectively in Chart 4. Each division studies 22 weeks, has approximately one week of vacation at each of four "division changes" and works approximately 26 weeks.

Chart 3

CONVENTIONAL MODEL

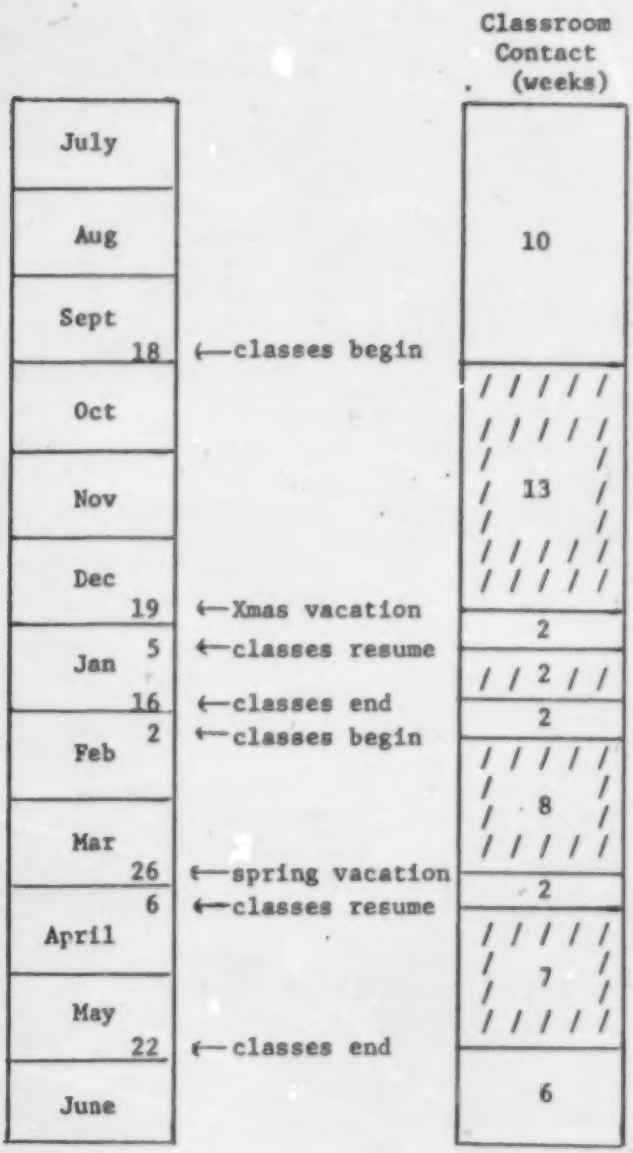
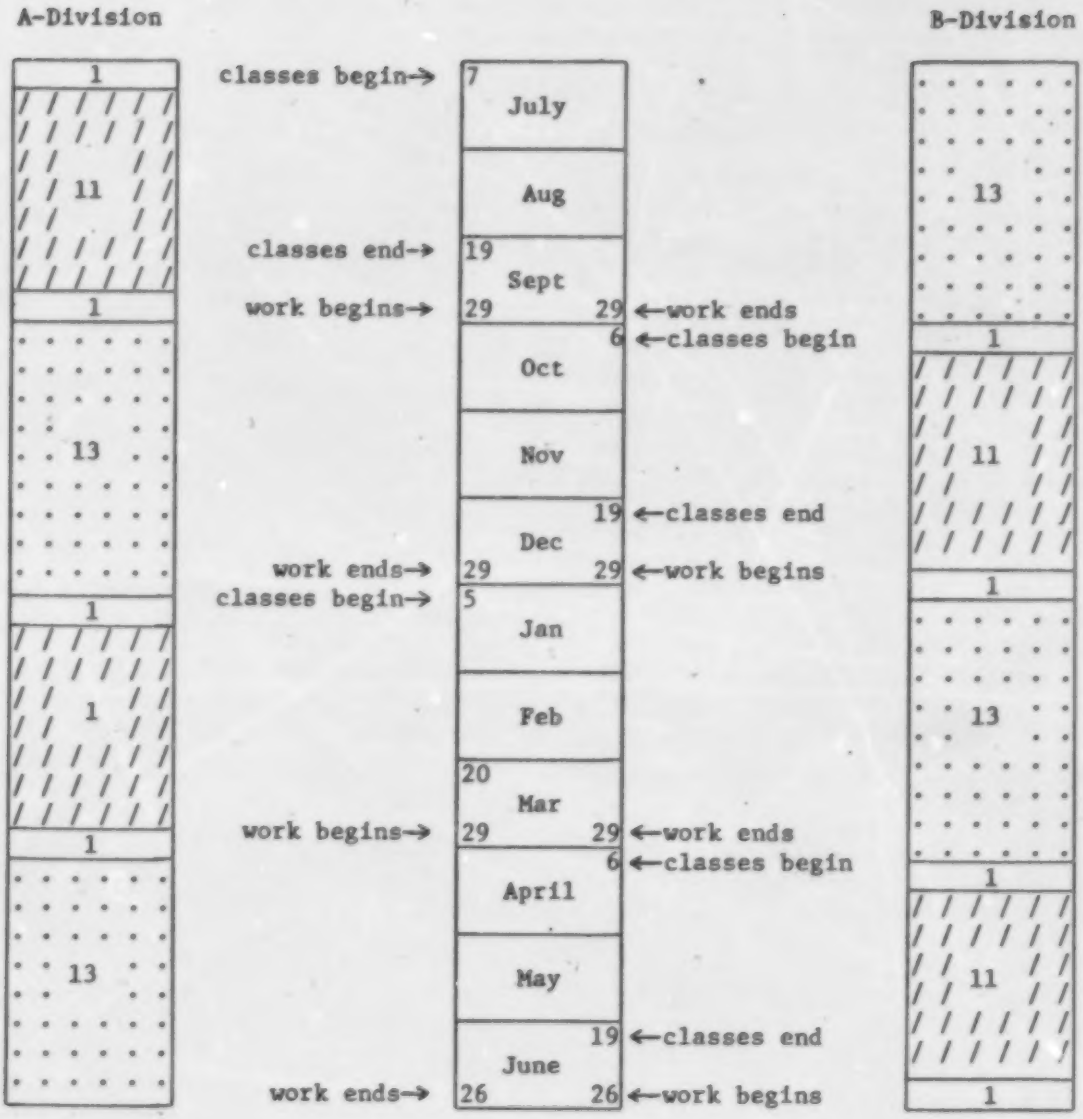


Chart 4

THE FOUR QUARTER MODEL



study 22
work 26
vac. 4

study 22
work 26
vac. 4

6.2422 The Trimester Model - This model is devised to fit into a conventional academic year, although it requires some irregularities in scheduling.

As shown in Chart 5, the student body is divided into three divisions, instead of two divisions as in the Four Quarter plan.

Only one-third of the total enrollment is available for work at one time and therefore the number of jobs which can be filled on a year round basis is smaller than in the Four Quarter Model. In addition, since the entire enrollment is off-campus during the 12 summer weeks, the plan favors longer vacation. But the off-campus experience of C-Division students is a bit disturbed, and therefore, they are engaged in special projects during half the summer.

6.243 The Parallel System Model - This model is adopted in all the community colleges in the State of Hawaii. In this model, the students attend classes half days and go out to work half days, both activities taking place when the college is in session, and when the college is closed during summer, the training program is also suspended. Although the principle is the same, there are some finer points in implementation in different community colleges in the State of Hawaii as shown in Chart 6. Some colleges prefer to send the students to training stations in the second semester of the first year at college (as in Honolulu Community College), and some colleges prefer to send the students in the first semester of the second year at

Chart 5

THE TRIMESTER MODEL

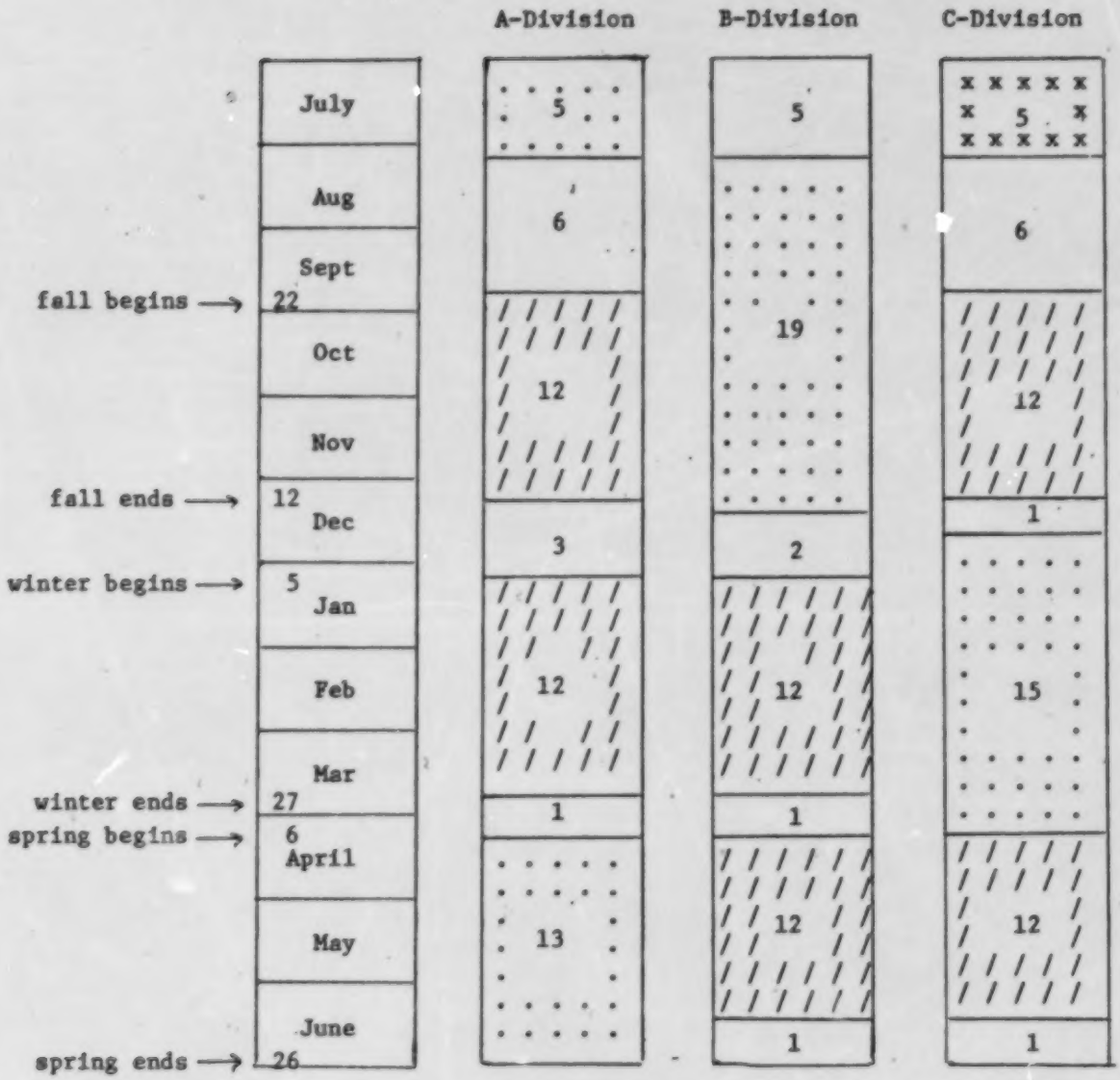
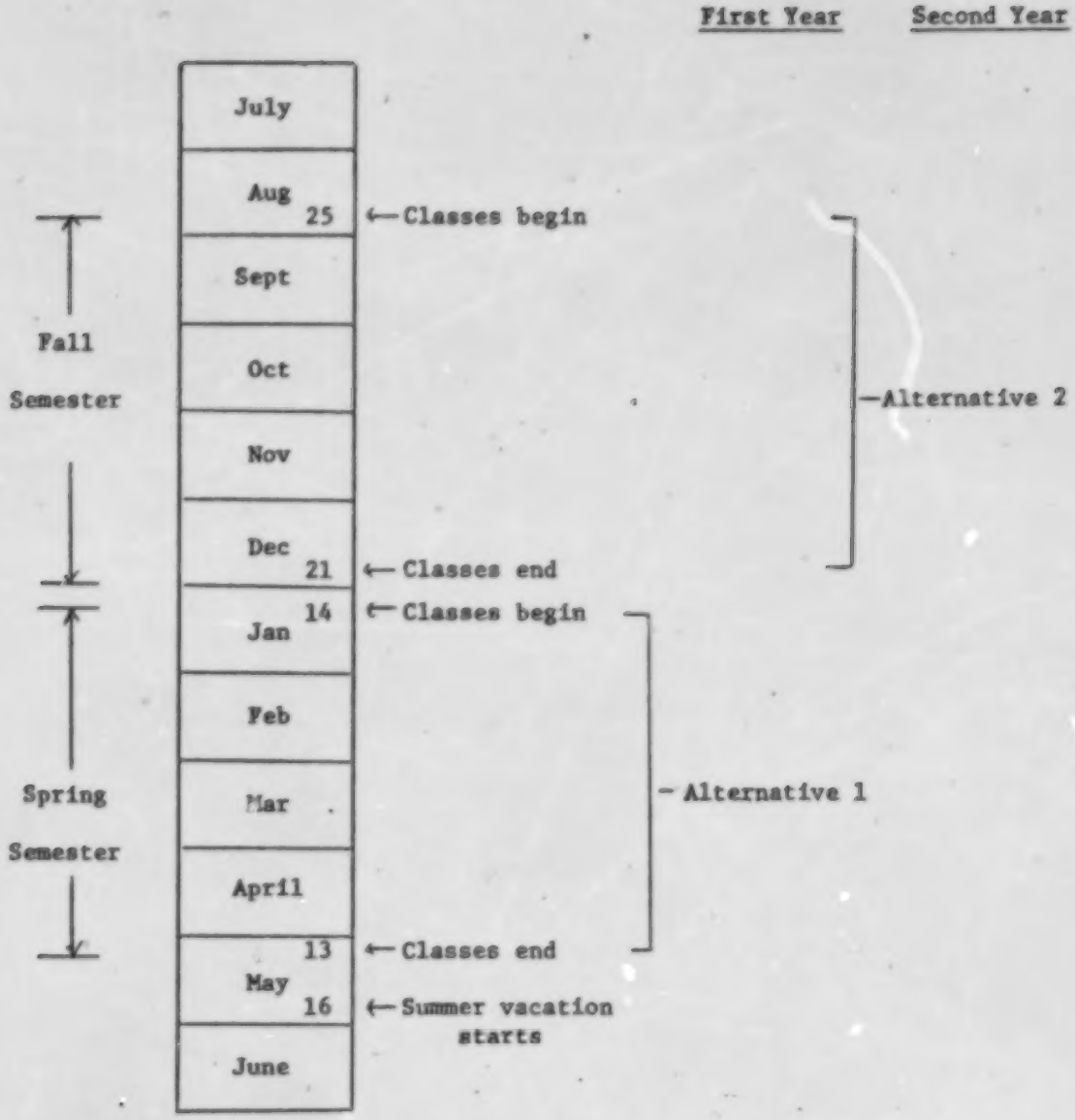


Chart 6

PARALLEL SYSTEM MODEL



Alternative 1: Cooperative training program commences here in first year and continues throughout in second year.

Alternative 2: Program commences in second year.

college (as in Leeward Community College). However it is noted that both ways of implementation achieve the same objectives of the training program, since the standards of training are closely observed by the coordinators.

6.25 Cooperative Education Coordinators - The key person in this program is the coordinator, who should be (1) trained in coordination techniques, (2) experienced in occupational area, and (3) trained in counseling responsibilities. This type of program can only succeed only if the students' activities, both in college and work, are coordinated to assume maximum learning. They are coordinators in the sense that they look after the coordination of the college students with off-campus work stations. Alternatively they can also be instructor-coordinators who teach the subject as well as doing the coordination function in cooperative education program.

6.251 Main Duties[12] - Major duties and numerous tasks which are to be performed by instructor/coordinators follow:

1. Guidance and counseling of students - the coordinator is responsible for describing the program to students, working with guidance personnel, providing occupational information, counseling students about entering the program, gathering information on students, programming and scheduing, and helping enrollers with career planning.

2. Placing students in training jobs - the coordinator is responsible for enlisting participation of cooperating employers, selecting suitable training stations for each student, orienting employers, training supervisors and co-workers, preparing students for job interviews, and placing students on the job.

3. Assisting students in adjusting to their work environment - the coordinator must help students on their jobs, deal with job problems, plan personal development with training supervisors and students, and evaluate job progress.

4. Improving training done on the job - the coordinator must establish responsibilities on the job, develop training plans, consult and assist training supervisors, and maintain training emphasis.

5. Correlating classroom instructions with on-the-job training - the coordinator must determine needed instruction, assemble instructional materials, prepare for instructions, teach classes, direct individual projects and study, obtain assistance from other teachers, advise training supervisors concerning applications of classroom instruction to be made on the job, and evaluate learning outcomes.

6. Assisting students in making personal adjustments - the coordinator must aid students in correcting poor personal habits, counsel students with personal and socioeconomic problems, assist students with educational problems, and resolve behavioral problems.

7. Directing vocational youth organizations - the coordinator must advise youth groups, guide students in organization of activities, and participate in group activities.

8. Providing services to graduates and adults - the coordinator must provide guidance and placement services for graduates, participate in the planning and operation of adult education programs.

9. Administration activities - the coordinator must plan program objectives, survey research and planning, organize and work with advisory committee, plan curriculum, communicate school policy, prepare reports, do budgeting and purchasing, participate in professional meetings, and consult with manpower agencies such as employment services.

10. Maintaining good public relations - the coordinator must plan the publicity program, prepare printed publicity, construct displays and exhibits, contact news media, and maintain communication with faculty, parents, community, employers, school administrators and student body.

6.252 Weekly Load[13] - A full-time coordinator does not have to teach formal related subjects classes. Their only duty is to perform the remaining duties and tasks of teacher-coordinators. For teacher-coordinators the weekly load, based on 5 days/week and handling 24 cooperative education students per coordinator,

is calculated as:

3 hours of related classes x 5 days		15 hours
1 hour of preparation and individual counseling period x 5 days		5 hours
1/2 hour of coordination x 24 student learners		12 hours
	TOTAL	32 hours

However, a full-time coordinator may be able to coordinate twice as many student learners. Thus, with 48 students, a typical weekly load will be as follows:

2 hours of individual counseling and preparation x 5 days		10 hours
1/2 hour x 48 student learners		24 hours
	TOTAL	34 hours/week

6.253 Handbook - For cooperative education teacher-coordinators handbooks and guide books are being prepared. They contain important information; policies and procedures, such as planning a new cooperative education program, conducting a program and labor laws, etc.[14]

6.26 Training Stations[15] - Since it is considered a laboratory where a student's theoretical knowledge is systematically tested and skills developed, to acquire the necessary proficiency in an occupation or occupational cluster, the development of training stations is important. In locating training stations, a number of resources to identify potential places of employment are utilized. In the early planning stages surveys must be made of primary sources of information about employers. Manpower surveys conducted on the national level provide the necessary information on variou types of work stations in the

community. Follow-up surveys of graduates and of their employers provide the required information.

The local office of the State Employment Office provides another good service of information about employers who wish to hire people for specific jobs. Manpower trend data and employment statistics maintained by the employment office can be used for long-term planning. Various associations can provide information about employment opportunities, and can influence each member of the association to establish training stations.

Once these stations are established, the major task of the coordinator is to develop training plans. Development should begin with defining career objectives and the main step in the development of a training plan is task analysis. This analysis is usually carried out with the assistance of the training sponsor and other individuals knowledgeable of the occupation to be analyzed. Then a decision is made on programs regarding training and instruction, which the training station personnel can provide, and instruction which the educationists must provide.

6.27 Credit for Off-Campus Experience[16] - If cooperative education is well designed and administered as an integral part of the whole education program, then credit as part of the degree requirements is given. This credit can be recognized in several ways.

One way is to recognize the lesser importance on academic requirements for the degree, allowing the remaining credits to be earned through a cooperative work. These credits can be treated on an equal basis as academic credits or a separate system of credits.

Another way is to simply give degree credit rather than academic credit for cooperative work. These credits will be fully honored on transfer to a 4 year college or university. More generally, although cooperative credits are honored, they are not transferable to be accredited to the 4 year college programs.

6.28 Problems in Implementation[17] - Earlier problems experienced in the initial states of implementation of cooperative education program in American community colleges were as follows:

1. The need to find suitable work assignments.
2. Resistance from labor unions and faculty.
3. The effects of war and economic recession.
4. The struggle to find suitable work-study patterns.

To find suitable work assignments and good cooperative employers is difficult. It has been designated as the job and responsibility of the cooperative education coordinator to find such employers. In addition, the coordinator must follow-up with both the student and employer to assure the needs of both are being satisfied.

Since 1935, and after the National Recovery Act was passed in America, workers' unions became active and stronger and workers' strikes became more prevalent. While the cooperative programs had to deal with the unions, each college had to deal with the union. Consequently, each college had to develop proper relationships with each different union. Some unions demanded that the students, while under training under cooperative education program, would be required to become union members so that

they could be controlled politically by the union. Most of the colleges adopted a different position by advising the students against joining unions if possible.

On the side of the teaching faculty, lack of support and occasional outright hostility were often felt. In addition, faculty in liberal arts have some difficulty in placing their students in work stations which are directly related to their fields of study.

Even if the work stations were all available, establishment of cooperative calendar of on-campus study and off-campus work would be a problem. A few colleges used an even number week period, 6 month period, or a full year for alternation. As part of the cooperative education requirement, some colleges allowed the students to fulfill complete study programs during the summer vacation, when they work with various business, industrial and service organizations.

6.29 Cooperative Education Programs in Hawaiian Community Colleges - Cooperative education programs are established in all of the Hawaiian community colleges. Some of the colleges have recently started this program. Some of the programs established in some community colleges are as follows:

At Honolulu Community College: Autobody repair and maintenance, carpentry, fashion design, human services, refrigeration and airconditioning, occupational safety and health, and industrial education (machine shop, technology and welding).

At Kapiolani Community College: Food service, legal assistant, secretarial science, business education (accounting, clerical, stenography, data processing), mid-management program (hotel operation, merchandising mid-management).

At Leeward Community College: Automechanics, drafting, food service, marine technology, graphic arts, accounting, management and secretarial service.

At Windward Community College: The plan is to introduce the program in automechanics trade and business education (clerical).

As a result of on-the-job training as part of the cooperative vocational education, students earn cooperative education credits which are transferable as elective credits counted towards the AA or AS degrees or certificates. No more than 4 credits may be earned per semester, i.e., no more than 12 credits may be counted toward an AS degree, which will require 60-71 total credit hours depending upon the occupational major.

The method of calculation for credit determination adopted by the cooperative education coordinator at Leeward Community College is shown below as an example.

1 credit = 60-119 hours/semester of training + 2 hours seminar/semester (1 hour/day or 5 hours/week)

2 credits = 120-179 hours/semester of training + 4 hours seminar/semester (2 hours/day or 10 hours/week)

3 credits = 180-239 hours/semester of training + 6 hours seminar/semester (3 hours/day or 15 hours/week)

4 credits = 240 and up + 8 hours seminar/semester (4 hours/day or 20 hours/week)

The pattern of student enrollment in cooperative education programs in Hawaiian community colleges is shown in Table 4, which was based on the following information:

(1) Data taken from Report No. CC-IRP 93, October 1976, Education Services Division, Office of the Chancellor for Community Colleges, University of Hawaii.

(2) Observation that more students are in the Liberal Arts (48%) program than in vocational (44%) program.

Table 4

PATTERN OF % ENROLLMENT IN COOPERATIVE EDUCATION
IN HAWAII COMMUNITY COLLEGES

Campus	Total Enrollment	Enrollment in Vocational Major	Cooperative Education Enrollment	$\frac{(4)}{(2)}$ %	$\frac{(4)}{(3)}$ %
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	27,829	9,087	948		
Hawaii CC	2,091	1,049	341	16.3	32.5
Honolulu CC	8,991	2,777	40	0.4	1.4
Kapiolani CC	4,617	2,413	250	5.4	10.4
Kauai CC	1,302	439	43	3.3	9.8
Leeward CC	6,924	1,692	95	1.4	5.6
Maui CC	2,030	695	168	8.3	24.2
Windward CC	1,174	22	11	0.9	50.0
Average	-	-	-	5.1	19.1

(3) Total student enrollment, and enrollment in all vocational majors as of Fall, 1976.

(4) Total enrollment in cooperative education in 1977, and assuming that this enrollment is the same as in 1976.

It was noted during field trip studies that in cooperative education, students undergoing training are paid a minimum wage of $2.40 per hour by the employers.

7. APPRENTICESHIP TRAINING EDUCATION

Apprenticeship training education is a system of education made up of related technical training in an educational institution such as a community college, and on-the-job experience in an industrial occupation. This training will give the young worker a wide range of skills and knowledge, and increase his trade maturity gradually. The young worker is already working in an industrial enterprise and under this program he is gradually trained for a job which actually exists and which he will occupy when he completes his training period.

While undergoing training, he has to register at the community colleges and attend extended day (evening) classes, after his work hours on his main job. This training program is considered as a joint effort and responsibility of the community college and the mother industry, with the joint apprentice committees acting as liaison between the two. It is visualized that such a training program is implementable only when national organizations and independent professional associations are in existence. For a country like Burma, the apprenticeship training education would be considered as one of the favorable areas for long-term educational planning. Some relevant and related American concepts are outlined here.

7.1 Background Information[18]

In 1934 the Federal Committee on Apprenticeship was formed by the federal government. 25 individuals comprising 10 from employers, 10 from organized labor, and 5 from the public, were appointed by the Secretary of Labor to get advice on apprenticeship training policies, labor standards for the training, and other related matters. In 1937, the National Apprenticeship Act was introduced, from which all relevant national policies

for apprenticeship training education materialized.

7.2 National and Federal Level Support[19]

To make the apprenticeship program effective, cooperation between management and labor is essential. Therefore, in the American system, management and labor work together with government and education at the national, state, and local levels.

At the national level, the Federal Committee on Apprenticeship formulates policy matters for the Bureau of Apprenticeship and Training. This Bureau is under the U.S. Department of Labor. It assists industry in the development, expansion, and improvement of apprenticeship and training. It has its field staff, with offices in every state, help in the implementation and organization of the program. It's main function is to promote and encourage apprenticeships as a means of improving the nation's work skills. To coordinate the activities of the Bureau, different divisions of the Bureau are organized as follows:

1. Division of Registration and Review
2. Division of Field Operations
3. Division of State-Federal Relations
4. Division of National Industry Promotion
5. Division of Research
6. International Branch

The functions of these different divisions are well described elsewhere.[20]

7.3 State and Territorial Apprenticeship Agencies[21]

These agencies are recognized by the U.S. Department of Labor, and are established by 29 states, the District of Columbia, the Virgin Islands, and

Puerto Rico. Their work is implemented as an integral part of the national apprenticeship system in cooperation with the Bureau of Apprenticeship and Training.

7.4 State Vocational Education Departments and Community Colleges[22]

In the apprenticeship program, experience from the on-the-job training is related to theoretical instruction. The related theoretical instruction is usually given in local vocational schools or local community colleges. However, there are some sponsors who will conduct their own instruction programs or use supervised correspondence courses.

7.5 Types of Apprenticeship Programs

As long as the programs meet the requirements of the standards laid down by the Federal Committee on Apprenticeship, different types of programs are possible.

7.51 Individual Programs - An employer can set up his own program, without seeking assistance from anyone in either labor or government. He may appoint his own training director. If the program thus established by himself meets approved standards, it may be registered with either the Federal or a State agency. Such employer sponsored apprenticeship programs are operatable in plants which are not union organized.

7.52 Joint Programs - These programs are operated by joint committees of management and labor.

7.521 Individual Joint Programs - These programs are operated by a single employer and union representatives. This type is run mostly by large businesses, where the business is steady and can employ large number of people.

7.522 Group Joint Programs - These programs are operated by a group of employers and labor representatives. For example, in the building trade, groups of builders in an area cooperate with union representatives to make it possible for an apprentice to rotate from job to job of a similar nature, with the idea of permitting the apprentice to gain wide knowledge.

7.53 Government Programs - In these programs, the apprenticeships are open to almost anyone of working age who is in good physical condition. This program offers opportunities for those who may be old for apprenticeships in private industry, but not so old that they cannot switch occupations. Also it is not necessary for the apprentice to have been to a high school. It is required that he can make the grade in a Civil Service Examination.

7.6 Other Relevant Information

Apprenticeship education covers a wide field including the activities of not only education but also industry, labor, professional unions, and judicial matters. Some important information can only be quoted here in this report, and it will be beneficial if original literature is consulted when the need arises for future application. A condensed list of areas for which relevant information has been gathered is as follows.[23]

Qualifications of apprentices, terms of apprenticeship, probationary period, work schedule, hours of work for apprentices, wages, periodic examination, apprenticeship agreement, supervisor of apprentices, joint apprentice committees, certificate of completion of apprenticeship, ladder of promotion of apprentices after graduation, apprenticeship law, and journeyman.

7.7 Related Instruction in Apprenticeship Training[24]

The United States Department of Labor, being the guardian of the apprenticeship training program, is constantly trying to improve the training programs. Recently, one of its branches, The Office of Research and Development, Manpower, and Administration, has authorized the Department of Economics, Northeastern University, Boston, Massachusetts, to study the contributions of related classroom instruction in apprenticeship, and to make recommendations for the improvement of such instruction, where it was deemed necessary. A report was submitted after gathering of information from apprentices, journeymen, and apprentice coordinators from three trade areas viz., machinist, electrician and operating engineer. Some proposals were included with the objective of relating instruction in apprentice training so that the apprentices will gain technical knowledge and manipulative skills to become versatile all round journeymen.

7.8 The Relationship Between Cooperative Education and Apprenticeship Training Education in Hawaiian Community Colleges

The apprenticeship training education in some of the Hawaii community colleges will be discussed in section 7.9. During a seminar session on July 13, 1977 with J. Hashimoto, Training Coordinator, Hawaii Joint Apprenticeship Committee for the Sheet Metal Industry, Honolulu, Hawaii, the following points were noted:

> In Hawaii, the graduates from the community colleges may apply to join the apprenticeship program. He has to take the apprenticeship entrance examination, and if he passes he is allowed to join the apprenticeship training in a particular trade. Normally, for a high school graduate joining this program, it will take him 5 years in sheet metal apprenticeship training. However, if a graduate of the community college has officially enrolled in the apprenticeship training program, and if he has taken up, during 2 years at the community college, the sheet metal trade, it will take him 4 1/2 years to complete the apprenticeship program. Thus credit for 1/2 year is given for some of the basic courses he had studied and not for the experiences that he has received in the cooperative education program.

7.9 Apprenticeship Training Programs in Hawaiian Community Colleges

A private discussion with Mr. K. Kuboyama, Coordinator, Apprenticeship Training Division, Honolulu Community College, Honolulu, on July 15, 1977 has been very fruitful. It was learned that in the 7 community colleges in the State of Hawaii, apprenticeship training programs are offered now in 6 colleges. The newest college, i.e. Windward, however, is still in the planning stages for the introduction of this program. A synopsis of the respective activities follow:

> At Honolulu Community College, apprenticeship training programs in building trades, covering the professions of asbestos workers, bricklayer mason, carpentry, cement finishers, electrician, floor layer, glaziers, ironworker, lathers, millman working, operating engineer, painting and decorating, plasterers, plumbers, weather-proofer, refrigeration and airconditioning, reinforcing steel, sheet metal, are handled by the college. In some areas where the enrollment of students is below the breakeven point, home study apprenticeship training courses are introduced. Honolulu Community College is also handling special apprenticeship training programs for public workers, electricians of the Public Works and City and County of Honolulu.
>
> The apprenticeship program for the printers trade is run by Leeward Community College. Similarly, at Kapiolani Community College, apprenticeship program in food services is being offered.
>
> In those community colleges on other islands of the State of Hawaii, such as Kauai, Hawaii and Maui, all the programs are offered respectively in each college.

7.10 Training Evaluation Records

With the cooperation of Mr. K. Kuboyama, Apprenticeship Training Coordinator of the Honolulu Community College, and Mr. J. N. Hashimoto, Training Coordinator, Joint Apprentice Committee for the Sheet Metal Industry, Hawaii, samples of daily progress record, work progress record and instructor's evaluation record have been received. Some could be of immediate use for application in Burma, and application will be illustrated in section 10.11 of this report.

8. ADVISORY COMMITTEES[25]

8.1 Definition

"An advisory committee is a group composed primarily of persons chosen from segments of the community, state, or nation to advise educators regarding one or more educational programs."

8.2 Emphasis

Committees may be appointed and established on national, state, regional or local levels to advise those who are responsible for planning, implementing and maintaining education programs. These committees can neither assume legislative nor administrative responsibility.

8.3 Types of Advisory Committees

Alternative forms of advisory committees to be found in community colleges are:

1. A central coordinating advisory committee
2. A steering or ad hoc committee
3. A program advisory committee
4. A cooperative education advisory committee
5. Joint apprenticeship advisory committee

The first type of committee serves as control or governing agents for all other advisory committees. The third type of committee is concerned with a specific occupation or a small cluster of occupations. The fifth type has more authority than other committees, since it not only works with the college and community but also with the Bureau of Apprenticeship and Training of the Department of Labor.

8.4 Composition of Advisory Committees

It is usually sized to twelve members who represent appropriate employer-employee groups at various management levels, labor unions, students, and representatives of related community and professional organizations. When the program is running smoothly, two to three meetings per year may be held to deal with problems of program operation.

8.5 Functions of Committees

The various functions have been described elsewhere.[26]

8.6 Case Studies

An example was the operation of advisory committees at Kapiolani Community College. Proposals are collected from the members of the committees for added courses and curriculums. An analysis of various proposals from community leaders in business and industry will give indication relative to course contents, selection of training equipment, the nature and extent of employment needs, and evaluation of the effectiveness of the program. Curriculum recommendations of the committees have been implemented at Kapiolani Community College in the following areas: business administration, food services, handicapped program in food services, joint apprenticeship in food service, dental assisting, dietary technician, medical records technician, medical assisting, medical laboratory technician, occupational therapy assisting, practical nursing, radiologic technology, respiratory therapy, and legal assistant.

At Leeward Community College, 15 separate advisory committees are functioning as of today. These committees are: community services, accounting, automotive technology, college advisory committee, computer science, distributive education, drafting technology, graphic arts, hospitality

education, library technology, small business management, supervisory management, marine technology, recreational instructor, and secretarial science. The size of these committees ranges from 3 members in the college advisory committee to 10 members in graphic arts advisory committee.

9. COMMUNITY COLLEGES AND THE COMMUNITY SERVICE IN HAWAII[27]

The trend of service of community colleges in Hawaii is toward emphasis on the "community aspect". To achieve this emphasis, the organizing principle of the college aims at providing appropriate services to the community directly by the college or in collaboration with other organizations.

Feeling the needs of and support by the community, a system to provide community services was introduced in 1971 in the University of Hawaii community colleges. Formerly and traditionally, universities and colleges were the seats of learning in the sense that students must attend on-campus instruction during the day. This traditional on-campus instruction concept is now changed. As a result of this modification of educational concept, students who are forced by other responsibilities, and elders who have never been to universities before but who had acquired various kinds of knowledge throughout their life span, can now attend classes during the day or evenings or weekends. Such special programs are handled by the community colleges under the program of "Continuing Education".

9.1 Program Activities of the Community Services

These activities are different in different community colleges. Some of the activities are as follows:

1. Continuing Education - This is not part of the regular credit program. Such a type of course designed to improve the educational level of high school dropouts was offered at Kalihi-Palama Education Center, which is a community based satellite campus of the Hawaii Community College System of the University of Hawaii.

2. Short-term Training - The purpose is to meet a specific need for skill training. These are usually courses of short duration with no related training and generally contracted by an industrial or business concern to meet their manpower needs.

3. Skill Centers - The operation of Skill Centers is based on the use of location of training facilities for short term training programs. They may be located on community college campuses and use the necessary facilities, or it may be a separate facility away from the college campus but operated by the community college.

4. Adult Education - For people of all ages above 18, the community college has the role of providing education, whether general or specialized.

5. Cultural Enrichment Activities - The facilities in a college can be a resource for these activities, such as the hanging and displaying of arts and crafts on campus, and special ethnic programs and activities.

6. Facilities Use - The colleges encourage the use of the facilities by the community. Oftentimes the colleges are community centers where people meet, congregate, and be forced to use the resources of the college.

7. Non-Credit Courses - For a variety of reasons, many people including high school students, housewives, employed workers, pre-retirees and retirees wish to take related courses. Therefore the related courses are designed and introduced as a non-credit option.

8. Apprentice Program - Although the training of apprentices and journeymen has been implemented in the form of extended day services, in some colleges it is placed under the responsibility of the community services.

9. Community Development - The basic concept is to provide expert assistance to communities to solve problems. Activities include speakers bureaus, consultation services, information/resource centers, and training of the indigenous leaders.

10. Special Needs - For this program the colleges provide the space to community groups, when they have conferences, lectures, forums, seminars, workshops, and meetings.

11. Fine Arts - The community is invited to join students and staffs for a series of concerts, films and fine arts festivals.

12. Senior Citizen Centers - Under the Honolulu Community College and with the assistance of the State Department of Budget, Hawaii State Senior Center was operated for the last 7 years. This center's activities depart from the traditional role expected of the retiree.

9.2 Community Service Technician

Such a training program is offered at Leeward Community College. The aim is to provide people with training and skill in handling other people

and community groups. Career options at the associate degree (technician) level offered at Leeward are: foster home operators, community outreach workers, education assistants and tutors, child care operators, legislative assistants, drug abuse counselors, social worker, group leaders, hospital aides, and so on.

Thus, in conclusion, it is visualized that the community services program gives the community colleges its flexibility and its capability of providing education in whatever form and at whatever size necessary throughout the community and for the community. By accepting people from all strata of the community, young and old, priviledged or nonprivi!edged, skilled and unskilled, rich and poor, the community college offers enrichment to all citizens of its community.

10. PLANNING FOR JET PROGRAM FOR REGIONAL COLLEGES OF BURMA

In this section an attempt is made to present some important points relevant to the planning for job experience training of regional colleges in Burma. However, some terms should be explained beforehand.

1. Regional College (R.C.)[28] - It is an academic institution consisting of two years of formal classroom and laboratory instruction followed by one year of job experience training designed to produce middle-rung technicians.

2. Job Experience Training (JET) - It will be defined as a program of training regional college students by either (1) alternating study with a job in industry or business; the two experiences being so planned and supervised cooperatively by the college and the job station that each contributes definitely to the student's development in his chosen occupation, or (2) allowing him to work as a full-time apprentice in a job station under the joint supervision of the regional college and the work station for a period of not less than 1 year.

3. Job Station - It is a factory, office, organization, association or center owned either by the government, people's cooperative societies, graduate students cooperative societies, community or an individual, where a student can be trained to become a middle-rung technician.

4. Job Experience Education (JEE) - It will be defined as a type of education relating to the job experience training program.

5. Job Station Training Supervisor - A foreman, an engineer or administrative personnel from a job station supervising the training of regional college students while they are being trained in the job station. He may be appointed in this post on a part-time basis.

6. Coordinator - A full-time staff member of the college who coordinates the job experience training program for the college.

10.1 Coordination

In the Socialist Republic of the Union of Burma, the pattern of organization of the 17 regional colleges is entirely different from the Hawaii Community College System. Some of the educational activities are coordinated by the Central Regional College Supervisory Committee, of which the

Honorable Minister for Education is the Chairman. Some broad and inter-regional activities are coordinated by the Management and Social Affairs Committee of the Council of Ministers, of which the Honorable Minister for Education is one of the members.

At the regional level, the State/Division college supervisory committee coordinates the various functions of the college in consultation with the State/Division party units, State/Division people's councils, State/Division educationists and State/Division job station directors. The State/Division education officer of the Department of Basic Education officiates as the secretary of this State/Division regional college supervisory committee. The coordination pattern is as shown in Chart 7.

The Principal of the regional college (equivalent to a Provost in a community college in America) is a member of the State/Division regional college supervisory committee. He will implement the activities of the college according to the policies laid down by the supervisory committee, and with the assistance of heads of various departments of the college.

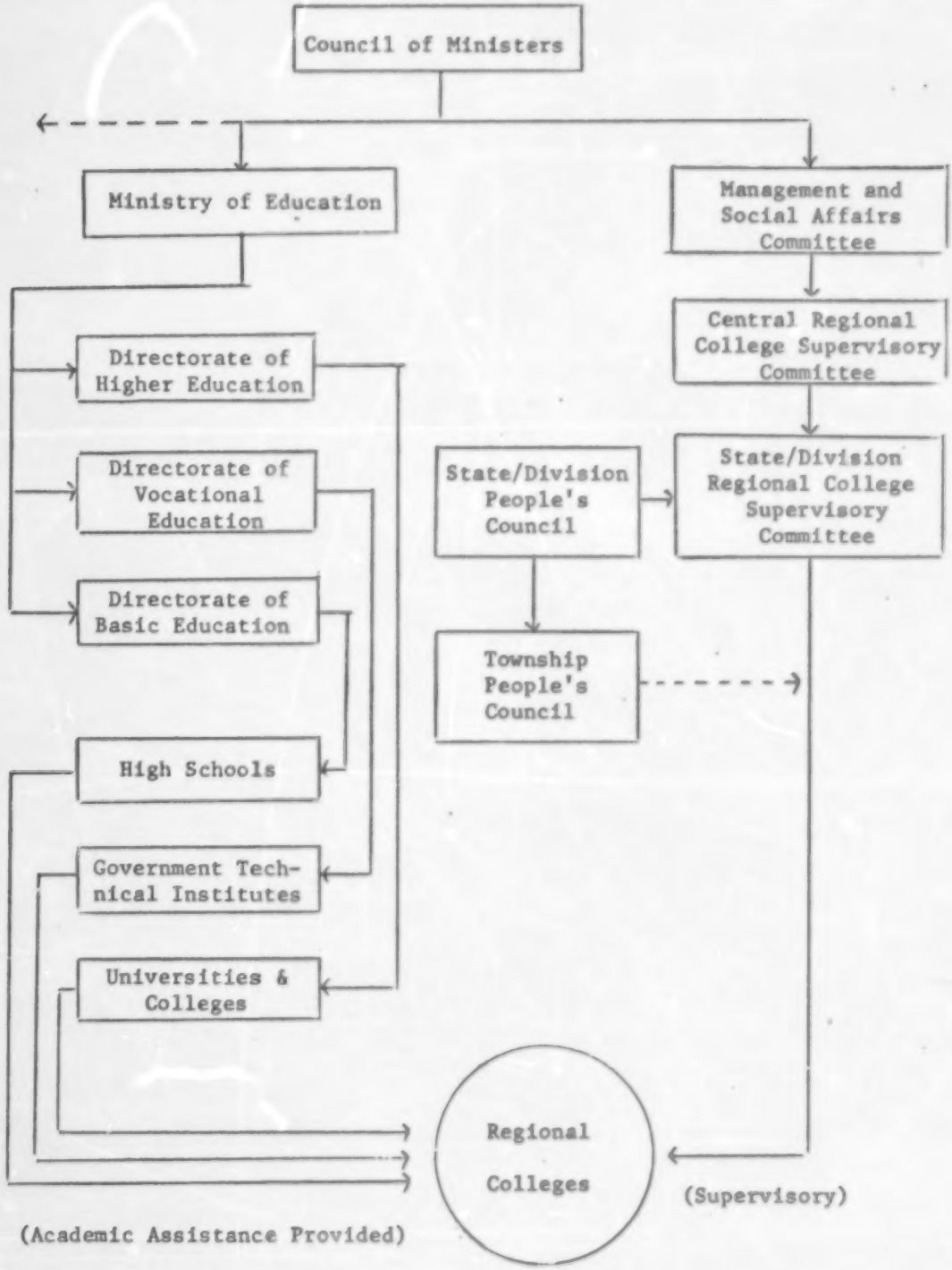
10.2 Formation of Committees

It is visualized that the job experience training will become effective if the following committees can be formed at the Central level and the State/Division level, all under respective main supervisory committees.

1. "Advisory Committees" to provide occupational information and guidance for job experience training program. Their activities may range from suggestions regarding curriculum, equipment, instructor qualification to job placement. These committees will be merely advisory and can neither assume legislative nor administrative responsibility.

Chart 7

PATTERN OF COORDINATION FOR REGIONAL COLLEGE ACTIVITIES



The JET advisory committee will have various committee members from government factories, community, education and college, among others. The JET coordinator should take the responsibility as the secretary of the committee, so that he can coordinate his program with the JET supervisory committee.

2. "Supervisory Committees" to assist the college and the work station in the implementation of the JET programs. Their activities may be mainly to assist the college program coordinator and the program supervisor of the work station in training the student to become a middle-rung technician at the completion of the training period. These committees will have some administrative responsibility, and as members, technicians from government factories, cooperative societies, people from community, party, council and youth organizations should be incorporated. The JET coordinator should also take the responsibility as the secretary of the committee since he is the man to administer the program.

10.3 Committee Members Tenure

Different alternatives are possible: "1 year, 2 years, 3 years, no formal limitations for appointment".

In the case of one year appointments, members who are especially active and valuable may be appointed for several terms.

The frequency of JET advisory committee meetings should be limited to not more than 4 meetings per year, but for the JET supervisory committee meetings, the frequency should depend upon the program situation.

To provide some guidance for these communities in the conduct of their advisory roles, proper handbooks should be written.

10.4 Alternatives for JET Program Design

The function of a regional college will be to provide the students with two years of formal classroom and laboratory instruction followed by one year of job experience training designed to enable them to become middle-level technicians. Therefore, it is likely that in their third year at college, they will have to undergo job experience training by working full-time in a job station.

However, if the education planners wish to extend the program to second year students, then different alternatives have to be considered. After weighing the pros and cons of different alternatives, the most probable model has to be adapted. By incorporating some finer points of the American cooperative education model as presented in section 6.24, different alternatives of JET program design for Burma are considered as follows:

Alternative 1: Only third year students are to be trained in JET program

For this alternative, the training program is simple. Plans can be drawn to send groups of occupational major students to their related job stations for the duration of training necessary, which may take either (1) 12 complete months from the date of reporting at the job station, so arranged as to be independent of the college calendar, or (2) 8-9 months from the date of reporting at the job station, so arranged as to coincide with the college calendar.

Although the 12 month training will definitely give the students a better chance to acquire job experiences, the college will experience some administrative difficulties. One of these difficulties may be the rotation of placement of students in the job stations. Since there is a difference of 3 months from the college calendar, there will

defintely be difficulty in systematically alternating the second year graduates and the JET completers. Based on this point, the 8-9 month training will provide harmony between the college program and the JET program. However, training programs for students to undergo within 8-9 months will have to be thorough.

During this period and at every 3 months, it will be advantageous for the students, as well as the college, if plans can be drawn to bring the students in batches for seminars at college to discuss various problems so that the coordinator can improve the training schedule in order to achieve training objectives.

Since the training is full-time, the program design is not exactly similar to any one of the cooperative education training models of any of the community colleges in Hawaii. However, the program records to be designed for the training program are adaptable.

Alternative 2: Not only third year students, but also second year students are to be trained in JET program

The educational planners may wish to consider this alternative in order to give students a maximum exposure to job experience training. The credit gained in the second year JET program may be beneficial for the students also when he proceeds for his full-time training in the third year. There are several ways for implementing this training program. The probable ways are: (1) to send second year students to work stations after completing the second year at college, and during the summer vacation, prior to joining the third year, this will serve as an extension and commencement of the third year JET program, and the JET program will not overlap with their academic study periods. (2) To send second year students to work stations in the second term

of college. The students will attend classes at college half-days and get training at job stations half-days, both activities taking place when the college is in session.

The first way, i.e., sending the students to job stations during summer will be suitable generally when the job stations are situated too far away from colleges. The second way which is similar to the "parallel system model" practiced throughout Hawaii, will be suitable when the job stations are situated in the areas close to the respective colleges. In addition, this second method will require alternation of groups of students attending lectures and other groups undergoing training, thus requiring the introduction of morning lecture sessions and afternoon lecture sessions on the same subject.

10.5 Values and Objectives for JET

Since education is universal, the values and objectives of job experience training for the regional colleges in Burma are basically the same as those designed for cooperative education in community colleges in Hawaii, which have been described in section 6.22. One additional objective which will be unique to Burma's regional colleges is to encourage the regional college graduates to set up their own small scale producer's cooperatives utilizing the raw materials of the region, and the knowledge gained through their college education and job experience training at the job stations.

10.6 JET Coordinators

Since the coordinator is the key person who is educating the students in efficient ways for the college to achieve the educational objectives, he must have the following qualifications:

1. He should not necessarily be a graduate, but should be matured enough to handle his job effectively.

2. He should have experience or be trained in techniques of work coordination between various state and regional organizations, party, people's council, community and students.

3. He should be dedicated to his job.

His main duties will be outlined below:

1. Selecting job stations and placing students.

2. Preparing training agreements and training plans.

3. Conducting coordination visits and coordination seminars.

4. Providing related instruction and evaluating students.

5. Working with JET advisory and JET supervisory committees.

6. Establishing and maintaining good public relations.

7. Conducting program evaluations and follow-up studies.

8. Teaching them some labor laws and factory laws and regulations.

10.7 Coordinators' Guidebook

A JET program coordinators' guidebook should be written and issued to the coordinators. It should cover important areas like: (1) objectives of regional college education, (2) objectives of job experience training, (3) role of the coordinator, (4) program implementation procedures, (5) program evaluation, (6) labor laws and factory regulations, (7) training agreements and follow-up procedures, and (8) program records to be used.

For the design of this book for Burmese regional colleges, it will be sufficient to refer to the guide lines of the book issued by the Office of the Chancellor for Community Colleges in Hawaii, namely, "University of Hawaii, Community Colleges: A Guide for Coordinators of Cooperative Vocational Education Programs, August 1976;" however, it should be redesigned

and rewritten for Burmese conditions.

10.8 Weekly Load for JET Coordinators

There will be two probable alternatives for employing the duties of the JET coordinators:

1. The possibility of using present instructors who are already teaching second year occupational majors, who will then be instructors/coordinators for the college.

2. The possibility of appointing full-time coordinators who will only be responsible for third year JET programs.

In the first alternative, there will be a saving in expenditures for the college. However, JET program may not be handled effectively due to (1) the excess work load of the instructor/coordinator, (2) diversion of attention and responsibility of the instructor/coordinator, and (3) lack of dedication to main duty.

In the second alternative, the appointment of full-time coordinators will probably be a financial burden. However, before the decision is made, the long term benefits of such appointments should also be considered.

If full-time coordinators are to be appointed, the effectiveness of training can be achieved if appointment considerations include (1) the ratio of 1 coordinator for every 50 students in an occupational major either in one job station or in many job stations, (2) the ratio of 1 coordinator for every 50 students in assorted occupational majors either in one job station or in many job stations, and (3) the ratio of 1 coordinator for every 50-100 students in either an occupational major or assorted occupational majors in one particular job station.

To choose the alternative suitable for a regional college, additional information will require the availability and number of job stations in the region, and the financial situation of the college, not mentioning that the

objectives of the regional college education must be achieved.

Assuming that full-time coordinators are appointed, and assuming that second year students and third year students are undergoing training, for a workload of 50 students for 5 1/2 days per week, the weekly load for a full-time coordinator will look like:

(a)	1/8 hour of job station visits per student/day for 2 days for 25 students	6 1/4 hours
(b)	1/8 hour of job station visits per student/day for 2 days for another 25 students	6 1/4 hours
(c)	Training records updating	8 hours
(d)	Overall coordination	8 hours
(e)	Counseling	2 1/2 hours
(f)	Other college activities	2 hours
	TOTAL	34 hours/week

Thus, an average workload of 34 hours/week should be reserved for him.

10.9 Job Stations

A survey has been made recently for the regional colleges on probable job stations in different regions/divisions in Burma. The survey teams consisted of professors, lecturers and instructors from universities and colleges, and technical institutes. With the guidance of respective State/Division Peoples' Councils concerned, and with the cooperation of the respective State/Division directors of government factories, offices, organizations and cooperative societies, it became possible for the survey teams to compile lists of probable training areas in the related job stations. Based on the reports of the survey teams, the Central Regional Colleges Supervisory Committee is going to present the program to the Council of

Ministers for suggestions and approval. This process is necessary to gain coordination effort for the benefit of job experience training for nation-wide regional college students.

There are other job stations operated by the State/Division producers' cooperative societies. Also, among the business concerns owned by private people, some centers have the standards suitable for selection as job stations.

10.91 Guidelines for Selection - The following factors may be considered by coordinators when training stations are selected.[29]

1. Will the job provide training in all appropriate phases of the occupation rather than in routine activities only?
2. Will the job provide a sufficient number of hours of profitable training?
3. Will the job experiences contribute to students' career objectives?
4. Will the job station manager pay the student at least minimum wage?
5. Is the job station a reasonable distance from the students' home or colleges? If so, what will be the method of transportation for him?
6. Has the job station appropriate equipment and facility related to the students' classroom instruction?

10.92 Standards - Of all the standars required, a few are worth mentioning and these are:

1. The job station knows the purpose and objective of regional college education and the job experience training.
2. The job station offers a chance for continuous employment for students during the training period for which they are enrolled.
3. The job station has equipment and facility to provide appropriate learning experiences for the students.

10.10 JET Plan

"Training plans outline a definite plan of progressive experience and learning activities based on the students' current career objectives. They serve as schedules or step-by-step plans for training to be used by (1) the employer, to aid in planning on-the-job instruction, (2) the coordinator, to aid in the planning of related instruction to correlate with the on-the-job instruction, and (3) students to project their career objectives both in college and on-the-job."[30]

These plans indicate also whether training is to take place in college or in job stations, or in both places. Therefore they should be prepared cooperatively by the coordinator and the job station training supervisor.

The values of such training plans are numerous. A few of these values follow:

1. Training plans correlate related learning with job experience training instruction.
2. Training plans establish conditions for job station selection.
3. Training plans help the coordinator keep up to date.
4. Training plans serve as a guide for instruction of the student.
5. Training plans serve as guides for program evaluation.
6. Training plans provide and assures responsibility of job station training supervisors in planning the training program.
7. Training plans help the job stations to realize that JET is a planned training program.
8. Training plans help to identify the goals of students.
9. Training plans provide a tool for students to evaluate progress.

To achieve these values, training plans drawn should be thorough. In the initial planning stage, some coordination and organization work should be carried out with people from education, job stations, and state personnel

and people from community. The first reason which will necessitate such a job is that the JET coordinator from the college may not be familiar with the facilities available at the training station. The second reason concerns the job station in a way that the technical men of a job station may not appreciate having an outsider telling them exactly how to run their business according to the exact requirements of the college.

There are several alternatives in drawing training plans and some probable plans are: (1) to develop training plans based on the possible use of existing facilities available at the job stations in a region and making an effort to keep the training standards uniform from college to college; (2) to develop standard training plans for all the colleges and allowing the coordinators to implement the training plan with the most appropriate equipment available at the job stations.

In both these plans, coordination of theoretical knowledge education with practical experience training would be essential. Two models are considered here to help in forming ideas for application. The first model will give some guidelines on how to channel the lecture content into either the responsibilities of the college or the job station. The second model will indicate the planning of approximate training hours required on the basis of either (1) 9 month training period or (2) 12 month training period.

10.101 Step-by-Step Training Plan - Taking a common area which can be fully understandable by any technical or nontechnical person, an example of drawing a training plan is shown based on the demonstration model described elsewhere.[31]

STEP-BY-STEP TRAINING PLAN

Clerk-Stenographer

A. Title of Job: Clerk-Stenographer

B. Job Description: Perform secretarial duties of taking dictation, transcribing, typewriting, duplication, assembling, filing, ordering supplies and materials, assisting college, answering the telephone, and doing other works requested by the boss.

C. Career Objective: Executive Secretary

D. Areas of Experience and Training:

1. Taking dictation and transcribing
2. Typewriting
3. Duplicating
4. Assembling
5. Filing
6. Ordering supplies and materials
7. Assisting college
8. Using the telephone
9. Public relations
10. Office production techniques

E. Detail of Areas of Experience and Training

Planned Learning Outcomes	Training and Experience In Class	Training and Experience In Job
1. Taking Dictation & Transcribing		
a. learn to take dictation	X	X
b. learn to transcribe shorthand notes	X	X
c. develop ability to produce accurate copy consistently	X	X
d. study the files for samples of previous correspondence and other transcripts		X
2. Typewriting		
a. develop accuracy at a rapid rate	X	X
b. learn to type attractive letters	X	X
c. learn to type class transcripts		X
d. learn to type texts		X
e. learn to prepare attractive tabulations	X	X
f. learn to make multiple carbons	X	X
g. learn to correct and type from rough drafts	X	X
h. learn to proofread accurately	X	X
i. learn to change carbon ribbons	X	X

Planned Learning Outcomes	Training and Experience In Class	In Job
3. Duplication		
a. learn to cut stencil properly	X	X
b. learn to use styli and lettering guides	X	X
c. learn to use commercial duplicators	X	X
d. learn to store stencils properly	X	X
4. Assembling		
a. learn to swiftly assemble papers manually	X	X
b. learn to use manual stapler	X	X
c. learn to use machines		X
5. Filing		
a. learn to file alphabetically	X	X
b. learn to prepare file folders	X	X
c. learn to code and file stencils		X
d. become familiar with office files		X
e. learn to retrieve materials from office files quickly		X
f. form the habit of making and keeping an extra copy of everything prepared	X	X
g. attempt to discover ways to improve office filing system		X
6. Ordering Supplies and Materials		
a. become familiar with supplies used in office		X
b. observe need for replenishing supplies		X
c. learn to prepare supplies requisitions		X
d. learn to store supplies correctly		X
e. learn to order books		X
f. learn to order files		X
7. Assisting College		
a. learn to schedule appointments		X
b. become familiar with location of various offices and stations		X
c. learn to direct people to proper locations		X
d. learn to give assistance in library usage		X
8. Using the Telephone		
a. learn to answer the telephone courteously	X	X
b. learn to take and record messages	X	X
c. learn proper technique for making internal and external calls from office phone		X
d. learn to use staff directory		X
e. learn to secure information via the telephone		X

Planned Learning Outcomes	Training and Experience In Class	In Job
9. Public Relations		
a. learn to deal with people courteously at all times	X	X
b. learn to cooperate with workers in other offices		X
c. learn to furnish requested information		X
d. learn to supply needed materials		X
10. Office Production Technique		
a. learn to handle materials efficiently	X	X
b. learn to organize work according to its immediancy of need		X
c. learn to work under pressure of time deadlines without becoming disturbed	X	X
d. learn to perform a variety of office tasks in a swift, yet unhurried manner		X
e. form the habit of verifying the accuracy of all work produced	X	X

10.102 Apprenticeship Based Training Plan - When this plan was considered, the apprenticeship training schedule issued by the U.S. Department of Labor, Bureau of Apprenticeship and Training was studied. It was assumed that training plans can be arranged to meet the required training standards as well as the quality of the training product. Two alternative training periods were considered, either a 9 month period or a full 12 month period. The approximate training hours are calculated as 8 hours/day x 5 1/2 days/week x 4 weeks/month x (9 months or 12 months), which will be equal to either 1544 hours or 2112 hours of total training hours, including holidays but excluding Sundays and half Saturdays. A model for drawing up training plan, and for the distribution of training hours in the professional training for a textile technician-mechanic (Ring-Spinning-Room Mechanic) is shown here:

APPRENTICESHIP-BASED TRAINING PLAN

Textile Technician-Mechanic
(Ring-Spinning-Room Mechanic)

Training Plan	Approximate Training Hours	
	9 Months Period	12 Months Period
1. Clean up Man	15	15
2. Sweeper	15	15
3. Spool Picker	30	30
4. Roving Career	60	60
5. Doffer	15	15
6. Spinner a. piece up ends b. setting up roving c. wiping d. cleaning rings e. change travelers f. oiling rigs g. doffing h. labeling i. running out lots (evening up)	300	300
7. Card Room a. finisher hand b. roving weigher	30	36
8. Oiler a. schedules b. kind of lubricants c. proper amount of oil d. cleanliness in oiling e. use of lubricating chart	120	135
9. Yarn Weigher	60	72
10. Machine Shop a. use of hand tools b. assembly & disassembly c. drilling (hand drill) d. filing e. tapping f. reaming g. fitting h. use of measuring tools	50	54

	Training Plan	Approximate Training Hours 9 Months Period	12 Months Period
11.	Fixer Helper	100	220
12.	Overhauler a. processing steels and composition rolls b. buffing composition rolls c. lining and leveling frame, spindle rail and guide d. lining and plumbing spindles e. repairing, replaceing, setting and adjusting steel rolls f. replacing and setting driving and delivery rolls g. check and replace gears and studs h. adjusting roving traverse motions i. banding and taping j. adjusting idle pulleys k. adjusting lifting rods, arms, weights l. driving mechanism; repair and adjust m. repair and cover step rails n. repairing empty spool racks o. miscellaneous	350	440
13.	Fixer a. bands, tapes, etc. b. identify bad roving c. identify bad yearn d. change set-up e. replacing cylinders f. adjusting strokes & tapers g. yarn testing h. change gears and gear change chart reading i. making adjustments to avoid: 1. loose pulleys 2. idle pulley squeaks 3. excessive noises in head & cylinder j. making adjustment on drums	379	600
14.	Warp a. spooler b. dresser	20	20
	TOTAL	1544	2112

10.11 JET Record System

In the beginning of program implementation, at least five different forms may be necessary. As the system is proceeded, this record system may be improved for the effectiveness of the JET program. The necessary forms follow, the designs for which are based on some of those used in the community colleges in Hawaii.

1. Application Form - FORM/JET/1 for the student to apply to be admitted into the program. It contains some training agreements to be followed strictly by the student.

2. Interview Form - FORM/JET/2 to be given to the job station manager or job station training supervisor. By processing the relevant data after interviewing more than the required number of students, the most suitable students can be chosen and authorized for the training.

3. Agreement Between College and Job Station and Final "JET" Report by Job Station - FORM/JET/3, this is not a legal contract, but is to be used to serve as a guide for the job station in providing training, and to judge the performance of the trainee.

4. Student Work Schedule - FORM/JET/4, for the student to record the training schedule, this form may be used.

5. Student Monthly Time Report - FORM/JET/5, this form may be used by the job station to record the time and work hours of the trainee for the month. This information may be used by the coordinator to give credits for the training a student has received.

FORM/JET/1

MANDALAY REGIONAL COLLEGE

JOB EXPERIENCE TRAINING

APPLICATION FORM

Date _____

Student's Name _____

Father's Name _____

Student's Address _____ City _____

_____ State/Division _____

Date of Birth _____ Age _____

Height _____ Weight _____

Marital Status _____ Emergency Notify _____

Name and Address _____

_____

Job station location preferred: (give location and name)

(1) _____

(2) _____

(3) _____

Previous job experience (if any) _____

_____

Present Roll No. _____ Academic Year _____

Occupational Major _____ Class _____

Signature _____

(P.T.O.)

FORM/JET/1

STUDENT TRAINING AGREEMENT

The student, Ma/Mg _____ agrees:

1. to submit a job description (duties of job experience) to t · college coordinator not later than the second week of employment.

2. to submit the monthly time report to the coordinator, no later than the first week of the month following the work period.

3. to be punctual for work.

4. to abide by the rules of the job station, and job safety standards.

5. to notify officially the job station on days when it is unavoidably impossible to report for work.

6. to discuss job problems with either the training supervisor of the job station or the college coordinator.

7. to work for the best interest of the job station at all times.

8. to regard matters of job station as strictly confidential.

9. to properly use the tools, instruments, equipment, and facilities of the job station.

10. to attend seminars when called upon by the college.

Signature _____

FORM/JET/2

MANDALAY REGIONAL COLLEGE
JOB EXPERIENCE TRAINING

INTERVIEW REPORT FORM

Date _____

Interviewer's Name _____

Student's Name _____

Father's Name _____

Student's Address _____

Designation _____ Class and Roll No. _____

Job Station _____ Occupational Major _____

(Please circle appropriate characteristics below)

APPEARANCE	PERSONALITY		MATURITY
Attractive	Dominant	Quiet	Very Mature
Neat	Strong	Talkative	Average
Ordinary	Reserved	Ordinary	Immature
Careless	Passive	Offensive	

PECULIARITIES	PLACEABILITY
Speech	Excellent
Manner	Good
Movement	Average
Other (State)	Marginal
	Poor

Comments: _____

_____

Suggestions for JET placement: _____

_____

_____
Interviewer's Signature

(P.T.O.)

FORM/JET/2

REMARKS ON MAJOR COURSES

1. Major courses completed and hours/week.

2. Major courses in progress and hours/week.

3. Major courses to be taken and hours/week.

4. Level of placeability.

FORM/JET/3

MANDALAY REGIONAL COLLEGE

JOB EXPERIENCE TRAINING

AGREEMENT BETWEEN COLLEGE AND JOB STATION

This training agreement is (1) to clearly define the conditions and schedule, whereby Ma/Mg _____ is to receive training in _____ occupational major, and (2) serve as a guide to the job station, in providing the student with opportunities for education and job experience training at a college level. The objective of the plan is to organize the training on the best possible basis, so that the maximum learning development may be acheived by the student. The job station agrees to assist the college in giving the student a well-rounded training by assigning the student to several phases of job experience during the training period. The job station also agrees to suggest the appointment of a training supervisor from the station on a particular time basis, for which he will be paid by the college.

The student agrees to perform the job assignments by the job station in accordance with the same policies, rules and regulations that apply to regular employees.

The JET coordinator and the occupational major instructors will assist the job station in carrying out the continuous training of the student, and will also correlate classroom instruction with job experience training received by the student. The student's progress on the job will be evaluated by both the training supervisor and the college coordinator, and from these evaluations, a grade will be awarded to the student.

In addition to providing JET, the job station agrees to compensate the student a starting wage of K _____ /per hour.

The training period commences on _____ 19____, and continues up to _____ 19____. The program consists of a maximum of _____ hours per week of JET activities. The JET may be obtained during weekends and/or college holidays.

Approvals

Student _____

Job station manager or training supervisor _____

Job station address _____

Major Instructor _____ JET Coordinator _____

Date _____

(P.T.O.)

FORM/JET/3 (contd.)

FINAL "JET" REPORT BY JOB STATION

Please kindly express your opinio of this student as a worker. Your opinion will be treated strictly confidential. This information will be used by JET coordinator for guidance of the student and grade evaluation for his diploma or certificate.

Student's Name _____ Father's Name _____

Roll No./Class _____ Occupational Major _____

Period of Employment: from _____ to _____

Employing job station and address _____

_____

Job station manager/director _____

General

Attendance: regular / irregular
Overall rating: excellent / very good / average / marginal / poor

Relations with others
___ Exceptionally well accepted
___ Works well with others
___ Gets along satisfactorily
___ Some difficulty working with others
___ Works very poorly with others

Attitude (Application to work)
___ Outstanding in enthusiasm
___ Very interested and industrious
___ Average in diligence and interest
___ Somewhat indifferent
___ Definitely not interested

Judgment
___ Exceptionally mature
___ Above average in decision making
___ Usually makes the right decision
___ Often uses poor judgment
___ Consistently uses poor judgment

Dependability
___ Completely dependable
___ Average in dependability
___ Usually dependable
___ Sometimes careless or neglectful
___ Unreliable

Ability to learn
___ Learns very quickly
___ Learns readily
___ Average in learning
___ Rather slow in learning
___ Very slow in learning

Quality of workmanship
___ Excellent
___ Very good
___ Average
___ Below average
___ Very poor

- - - -

FORM/JET/4

MANDALAY REGIONAL COLLEGE

JOB EXPERIENCE TRAINING

STUDENT WORK SCHEDULE

Student's Name _____ Father's Name _____

Class & Roll No. _____ Occupational Major _____

Job Station & Address _____

_____

Supervisor's Name _____ Position _____

Rate of Pay for Student, K _____ per hour

Weekly Work Schedule

From _____ 19___ to _____ 19___

In order that you may use this in the compilation of a JET appreciation report and receive a grade for a well-rounded practical training, note down the weekly work functions which you have been performing.

Date	Time fr.___ to___	Training Department	Practical Experience
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Student's Signature _____ Date _____

Note: The student must submit a term paper on learning experience after completion of his training in a job station. This will be graded by the coordinator and credit for training will be given and honored by the college.

(P.T.O.)

FORM/JET/5

MANDALAY REGIONAL COLLEGE

JOB EXPERIENCE TRAINING

STUDENT MONTHLY TIME REPORT

Report for Period, from _____ to _____

Student's Name _____ Supervisor's Name _____

Father's Name _____ Designation _____

Class & Roll No. _____ Occupational Major _____

Job Station & Address _____

Time and Hours Worked			Job Station's Verification
Date	Time	Hours	Supervisor I certify that the above named student of Mandalay Regional College was undergoing training in my job station for the time and number of hours indicated on this form. Signature _____ Date _____
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31..			(For Official Use Only) Approved by _____ (Coordinator) Date _____
Total Hours _____			

FOOTNOTES

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[26]Ibid.

[27]Committee Members, Community College Master Plan: Section on Community Services (Honolulu, Hawaii, Office of the Chancellor for Community Colleges, June 23, 1976).

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[28]Lawrence F. H. Zane and John Rantala, A Proposal for the Establishment of a National Training Center for Regional College Staff (Honolulu, Hawaii, University of Hawaii, 1977).

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[30]Ibid.

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